FCC PART 15.407

TEST REPORT

For

Chengdu Vantron Technology, Ltd.

No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China 610045

FCC ID: 2AAGETAB185-SKLU

Report Type:	**Product Name:**
Original Report	Embedded Computer

Report Number:	RSC180208001-0D
Report Date:	2018-07-31
Reviewed By:	Sula Huang Engineering Director
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Chengdu) No. 5040, HuiLongWan Plaza, No. 1, ShaWan Road, JinNiu District, ChengDu, Sichuan, China Tel: 028-65525123, Fax: 028-65525125 www.baclcorp.com

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Chengdu). This report must not be used by the customer to claim product certification, approval, or endorsement by A2LA* or any agency of the Federal Government. * This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "*".

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The ***Chengdu Vantron Technology, Ltd.***'s product, model number: **VT-TAB185-SKLU (FCC ID: 2AAGETAB185-SKLU)** or the "EUT" as referred to in this report was the **Embedded Computer**.

Mechanical Description of EUT

The EUT was measured approximately: 471.86 mm (L) x 283.86 mm (W) x 18.01 mm (H).
The EUT has two power input ports, details see EUT external picture.

Rated input voltage: DC 15.2V rechargeable Li-ion battery or DC19V from adapter.

Switching Power Adapter Information
Manufacturer: FSP Group Inc.
Model: FSP065-REBN2
Input: AC 100-240V; 50/60Hz
Output: DC 19V, 3.42A

**All measurement and test data in this report was gathered from final production sample, serial number: 180208001/01 (assigned by the BACL, Chengdu). It may have deviation from any other sample. The EUT supplied by the applicant was received on 2018-02-02, and EUT conformed to test requirement.*

Objective

This type approval report is prepared on behalf of **Chengdu Vantron Technology, Ltd.** in accordance with Part 2-Subpart J, Part 15-Subparts A, C and E of the Federal Communications Commission rules.

The tests were performed in order to determine compliance with FCC Part 15, section subpart C, 15.203, 15.205, 15.207, 15.209 and Subpart E, 15.407 rules.

Related Submittal(s)/Grant(s)

FCC Part 15B JBC submissions with FCC ID: 2AAGETAB185-SKLU
FCC Part 15.247 DSS submissions with FCC ID: 2AAGETAB185-SKLU
FCC Part 15.247 DTS submissions with FCC ID: 2AAGETAB185-SKLU

Measurement Uncertainty

Item			Uncertainty
AC power line conducted emission			2.71 dB
Radiated Emission(Field Strength)	30MHz-200MHz	H	4.57 dB
		V	4.81 dB
	200MHz-1GHz	H	5.69 dB
		V	6.07 dB
	1GHz-6GHz		5.49 dB
	6GHz-18GHz		5.57 dB
	18GHz-40GHz		5.48 dB
Conducted RF Power			±0.61dB
Power Spectrum Density			±0.61dB
Occupied Bandwidth			±5%
Conducted Emission			±1.5dB
Humidity			±5%
Temperature			±1℃

Test Methodology

All measurements contained in this report were conducted with:

1. ANSI C63.10-2013 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

2. KDB789033 D02 UNII Meas Guidance v02r01.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Chengdu) to collect test data is located No.5040, Huilongwan Plaza, No. 1, Shawan Road, Jinniu District, Chengdu, Sichuan, China.

Bay Area Compliance Laboratories Corp. (Chengdu) lab is accredited to ISO/IEC 17025 by A2LA (Lab code: 4324.01) and the FCC designation No. CN1186 under the FCC KDB 974614 D01. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The EUT was configured for testing in an engineering mode which was provided by the manufacturer.

For 5150~5250 MHz band, channels are provided to test as follows:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a, 802.11ac20, 802.11n-HT20: Channel 36, 40 and 48 were tested; for 802.11ac40, 802.11n-HT40: Channel 38, 46 were tested; for ac80: Channel 42 was tested.

For 5725~5850 MHz band, channels are provided to test as follows:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785
151	5755	159	5795
153	5765	161	5805
155	5775	165	5825

For 802.11a, 802.11ac20, 802.11n-HT20: Channel 149, 157 and 165 were tested.
For 802.11n-HT40, 802.11ac40: Channel 151, 159 were tested; for ac80: Channel 155 was tested.

The worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all data rates bandwidths, and modulations.

802.11a supports SISO, 802.11n/ac supports SISO and MIMO mode. For Radiated Emission, according to pretest, the worst case of 802.11a is Antenna 1, the worst case of 802.11ac/n are MIMO mode. So 802.11a Antenna 1 and 802.11ac/n MIMO mode test data were recorded in the report.

EUT Exercise Software

The software "DRTU" was used for testing, which was provided by manufacturer. The maximum power with maximum duty cycle was set as below:

For 7265NGW Module

Software				DRTU			
UNII Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)		Power Level	
				Antenna 1	Antenna 2	Antenna 1	Antenna 2
5150-5250MHz	802.11a	Low	5180	6	6	16	16
		Middle	5200	6	6	16	16
		High	5240	6	6	16	16
	802.11n-HT20	Low	5180	HT0	HT0	13	13
		Middle	5200	HT0	HT0	13	13
		High	5240	HT0	HT0	13	13
	802.11n-HT40	Low	5190	HT0	HT0	13	13
		High	5230	HT0	HT0	13	13
	802.11ac20	Low	5180	VHT0	VHT0	13	13
		Middle	5200	VHT0	VHT0	13	13
		High	5240	VHT0	VHT0	13	13
	802.11ac40	Low	5190	VHT0	VHT0	13	13
		High	5230	VHT0	VHT0	13	13
	802.11ac80	Middle	5210	VHT0	VHT0	12	12
5725-5850MHz	802.11a	Low	5745	6	6	19	19
		Middle	5785	6	6	19	19
		High	5825	6	6	19	19
	802.11n-HT20	Low	5745	HT0	HT0	16	16
		Middle	5785	HT0	HT0	16	16
		High	5825	HT0	HT0	16	16
	802.11n-HT40	Low	5755	HT0	HT0	16	16
		High	5795	HT0	HT0	16	16
	802.11ac20	Low	5745	HT0	HT0	16	16
		Middle	5785	VHT0	VHT0	16	16
		High	5825	VHT0	VHT0	16	16
	802.11ac40	Low	5755	VHT0	VHT0	16	16
		High	5795	VHT0	VHT0	16	16
	802.11ac80	Middle	5775	VHT0	VHT0	15	15

For 8265NGW Module

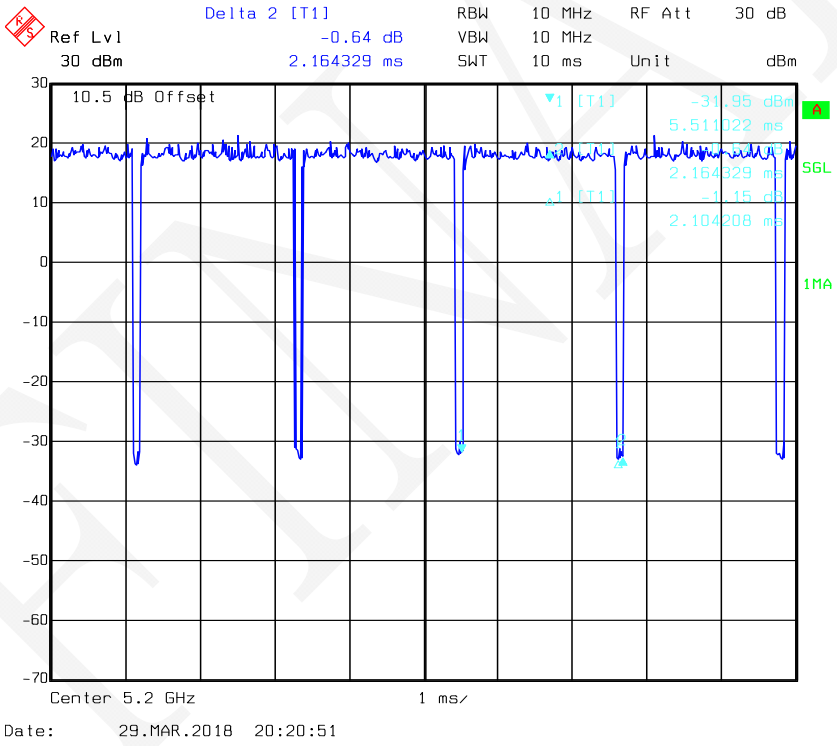
Software				DRTU			
UNII Band	Mode	Channel	Frequency (MHz)	Data Rate (Mbps)		Power Level	
				Antenna 1	Antenna 2	Antenna 1	Antenna 2
5150-5250MHz	802.11a	Low	5180	6	6	16	16
		Middle	5200	6	6	16	16
		High	5240	6	6	16	16
	802.11n-HT20	Low	5180	HT0	HT0	16	16
		Middle	5200	HT0	HT0	16	16
		High	5240	HT0	HT0	16	16
	802.11n-HT40	Low	5190	HT0	HT0	15	15
		High	5230	HT0	HT0	15	15
	802.11ac20	Low	5180	VHT0	VHT0	16	16
		Middle	5200	VHT0	VHT0	16	16
		High	5240	VHT0	VHT0	16	16
	802.11ac40	Low	5190	VHT0	VHT0	15	15
		High	5230	VHT0	VHT0	15	15
	802.11ac80	Middle	5210	VHT0	VHT0	15	15
5725-5850MHz	802.11a	Low	5745	6	6	17	17
		Middle	5785	6	6	17	17
		High	5825	6	6	17	17
	802.11n-HT20	Low	5745	HT0	HT0	17	17
		Middle	5785	HT0	HT0	17	17
		High	5825	HT0	HT0	17	17
	802.11n-HT40	Low	5755	HT0	HT0	17	17
		High	5795	HT0	HT0	17	17
	802.11ac20	Low	5745	VHT0	VHT0	17	17
		Middle	5785	VHT0	VHT0	17	17
		High	5825	VHT0	VHT0	17	17
	802.11ac40	Low	5755	VHT0	VHT0	17	17
		High	5795	VHT0	VHT0	17	17
	802.11ac80	Middle	5775	VHT0	VHT0	17	17

For 7265NGW Module

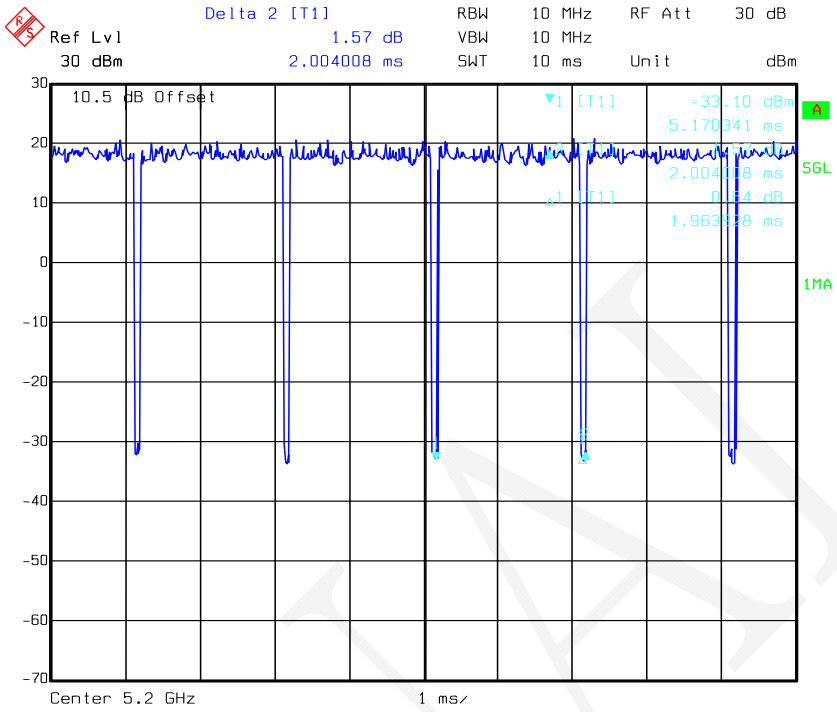
Duty Cycle information is below:

Mode	Ton(ms)	Ton+Toff(ms)	Duty Cycle(%)	Duty Cycle Factor（dB)
802.11a	2.10	2.16	97.22	0.12
802.11n-HT20	1.96	2.00	98.00	0.09
802.11n-HT40	0.98	1.10	89.09	0.50
802.11ac20	1.96	2.00	98.00	0.09
802.11ac40	0.98	1.12	87.50	0.58
802.11ac80	0.49	0.54	90.74	0.42

802.11a



802.11n- HT20



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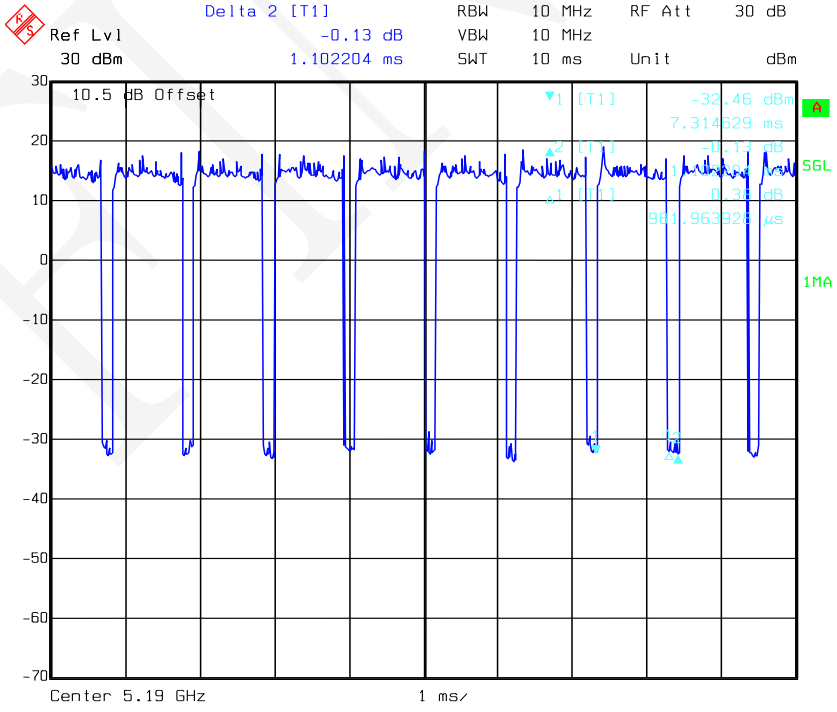
802.11n- HT40



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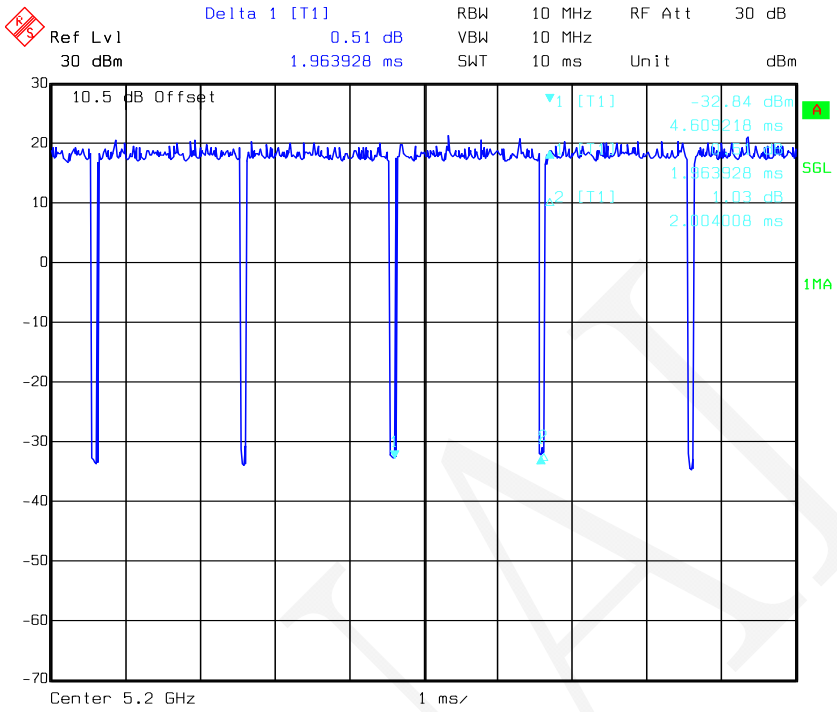
802.11ac20



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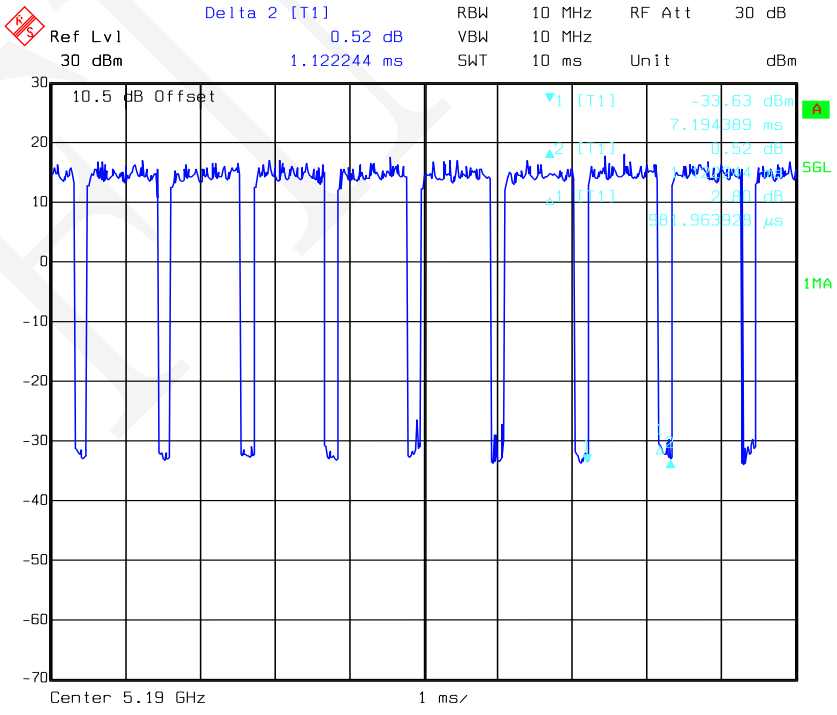
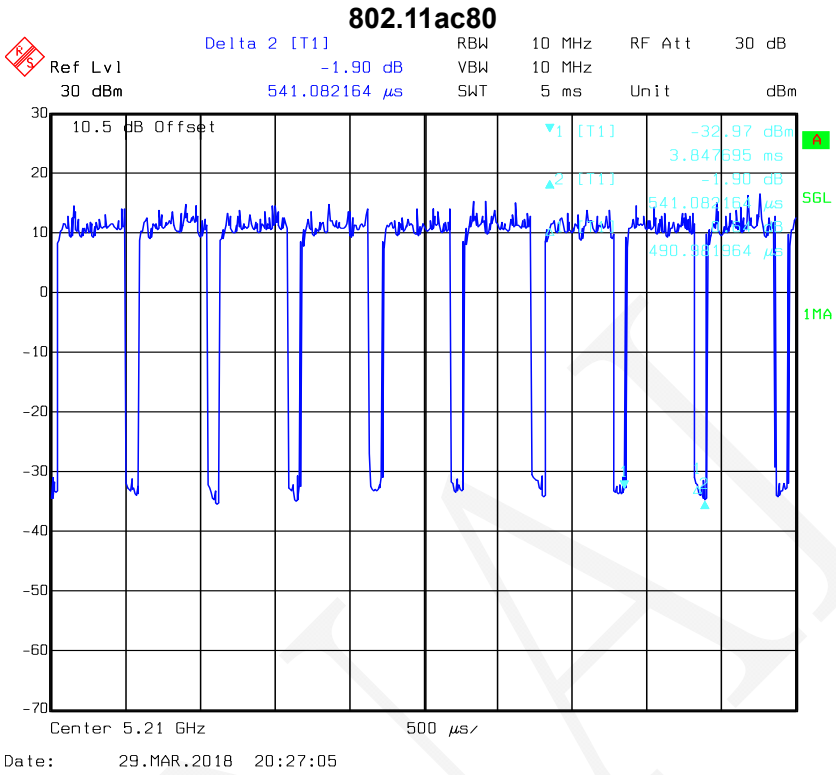


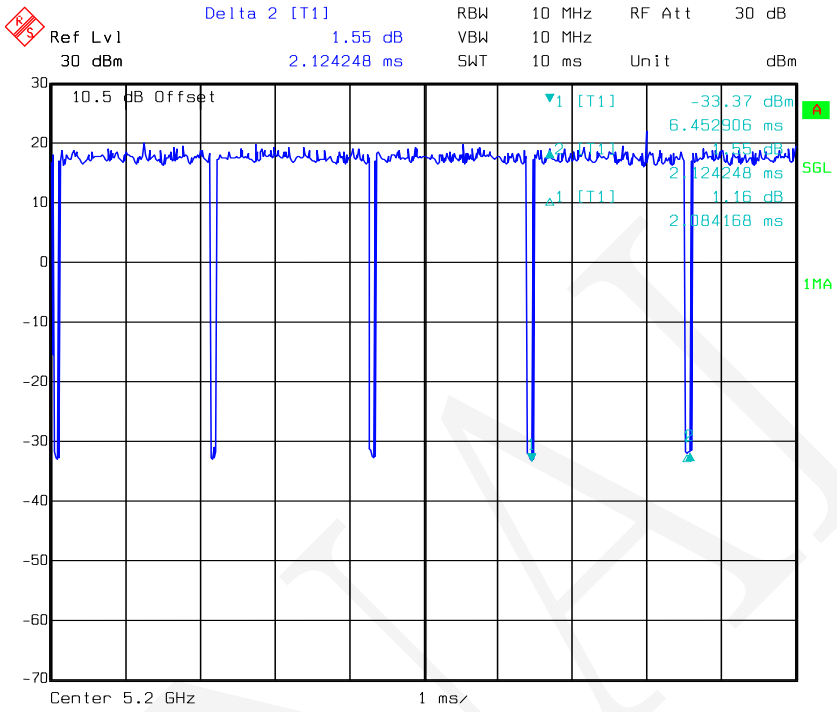


For 8265NGW Module

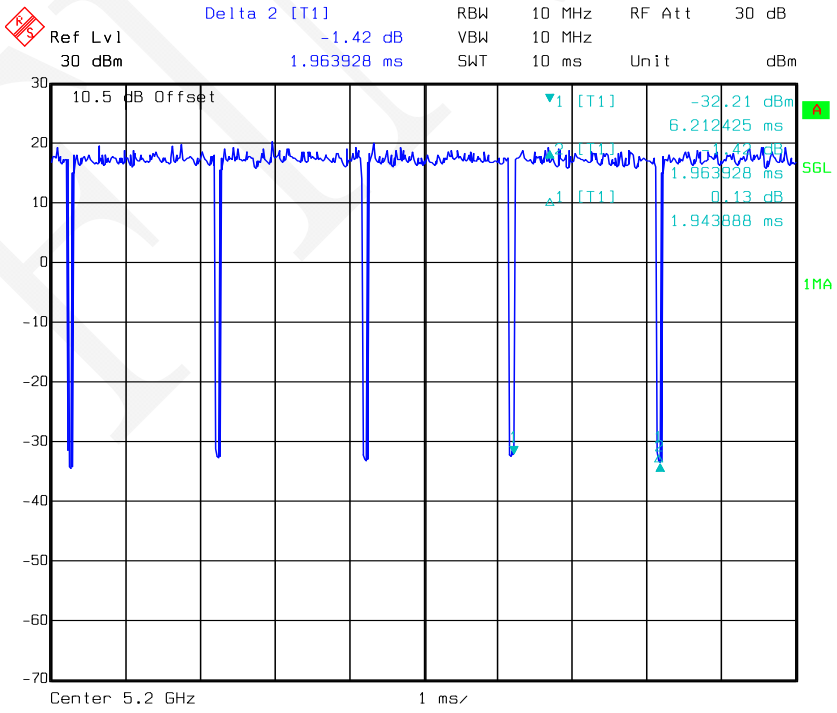
Duty Cycle information is below:

Mode	Ton(ms)	Ton+Toff(ms)	Duty Cycle(%)	Duty Cycle Factor（dB)
802.11a	2.08	2.12	98.11	0.08
802.11n-HT20	1.94	1.96	98.98	0.04
802.11n-HT40	0.98	1.00	98.00	0.09
802.11ac20	1.96	1.98	98.99	0.04
802.11ac40	0.98	1.00	98.00	0.09
802.11ac80	0.48	0.52	92.31	0.35

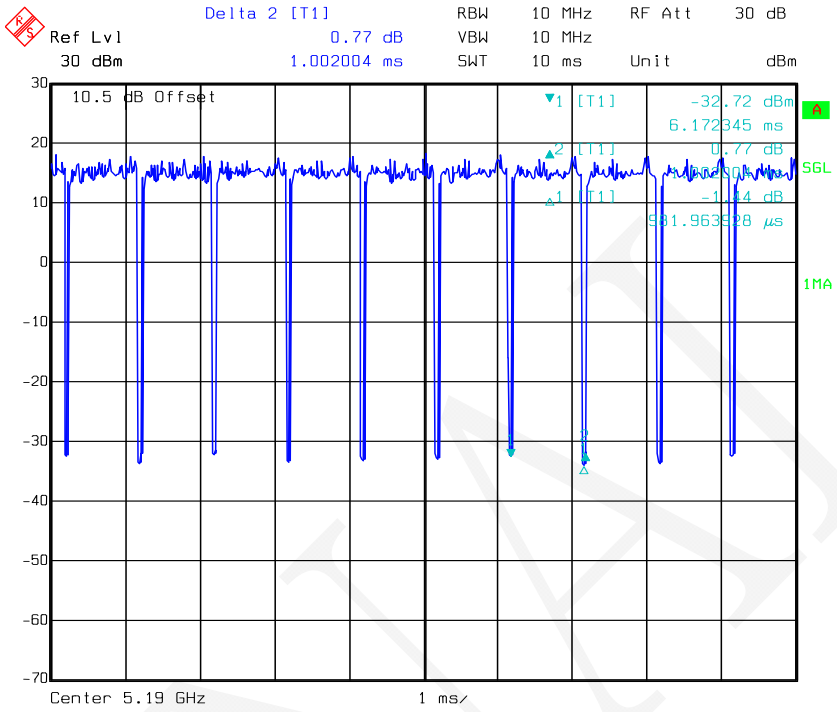
802.11a



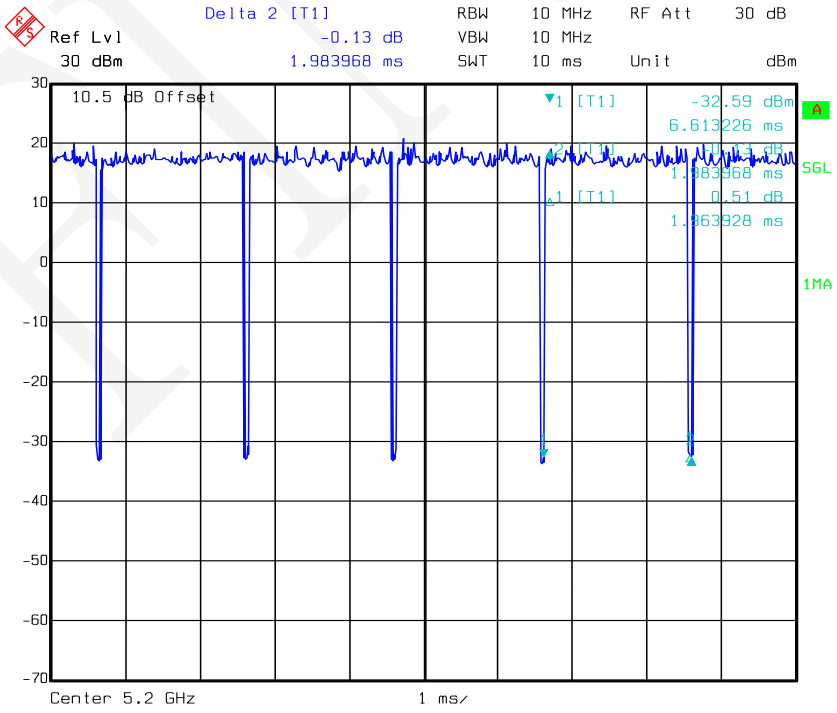
802.11n- HT20



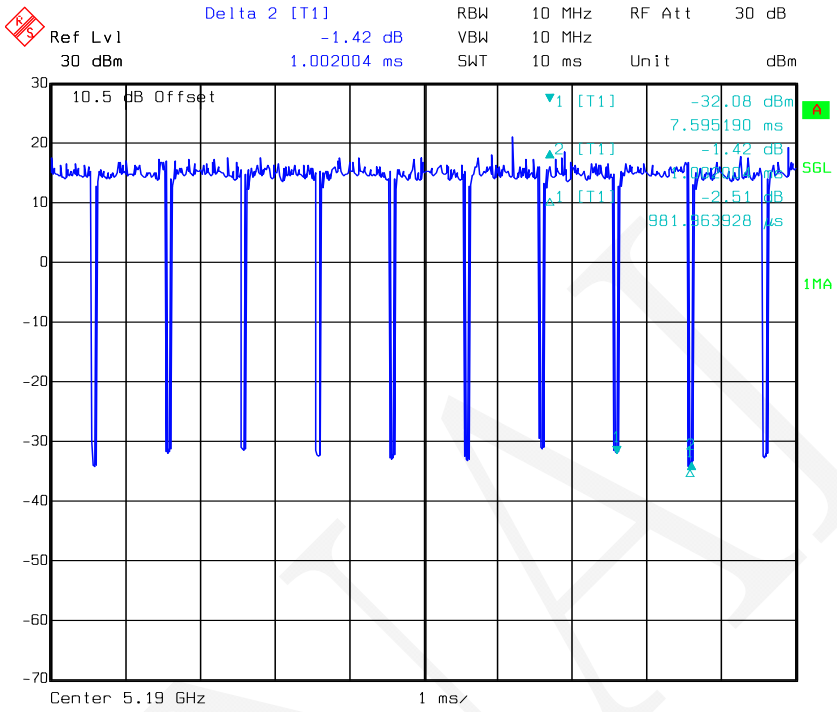
802.11n- HT40



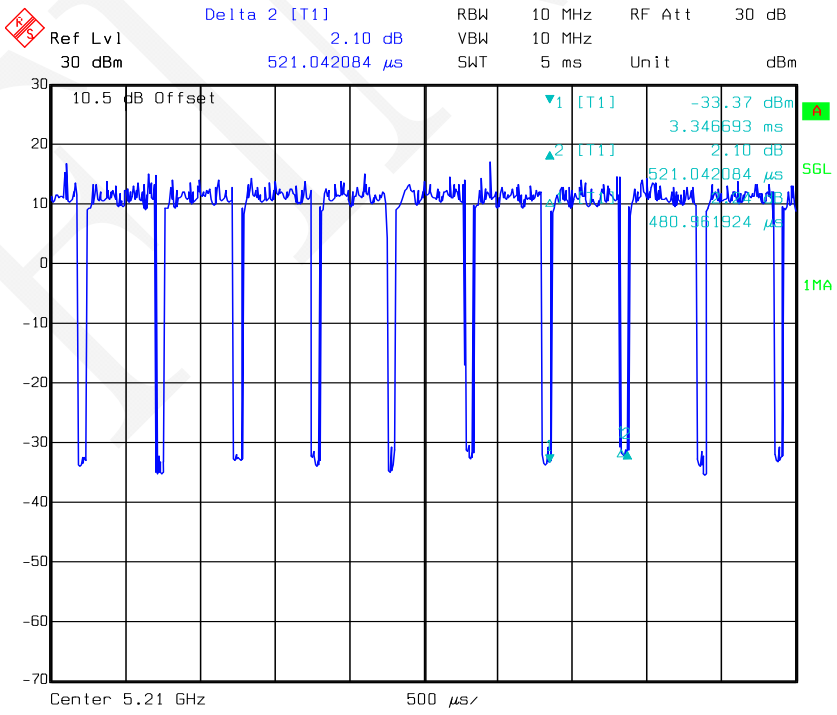
802.11ac20



802.11ac40



802.11ac80



Support Equipment List and Details

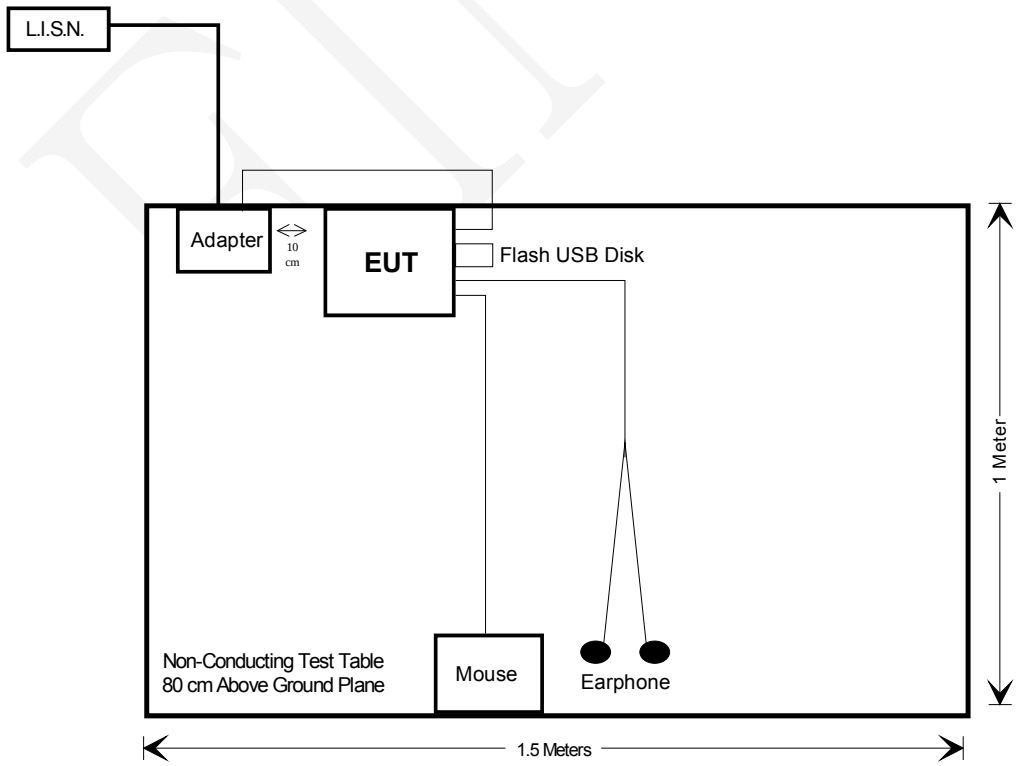
Manufacturer	Description	Model	Serial Number
Kingston	Flash USB Disk	DTSE9	7869951
HUAWEI	Earphone	P9	None
Logitech	Mouse	M-U0004	810-U01808

External I/O Cable

Cable Description	Length (m)	From	To
Unshielded Power Cable	1.2	Adapter	EUT
Unshielded Earphone Cable	1.0	EUT	Earphone
Unshielded USB Cable	1.8	EUT	Mouse

Block Diagram of Test Setup

Conducted Emissions



SUMMARY OF TEST RESULTS

For 7265NGW Module and 8265NGW Module

FCC Rules	Description of Test	Result
§15.407(f) & §1.1310 & §2.1091	Maximum Permissible Exposure(MPE)	Compliance
§15.203	Antenna Requirement	Compliance
§15.407(b)(6)& §15.207(a)	Conducted Emissions	Compliance
§15.205& §15.209 §15.407(b) (1), (4)(i), (6), (7)	Undesirable Emission& Restricted Bands	Compliance
§15.407(b) (1), (4)(i)	Band Edge	Compliance
§15.407(a) (1),(3) & (e)	26dB & 6dB Bandwidth	Compliance
§15.407(a)(1),(3)	Conducted Transmitter Output Power	Compliance
§15.407 (a)(1),(3),(5)	Power Spectral Density	Compliance

TEST EQUIPMENTS LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emission					
Rohde & Schwarz	EMI Test Receiver	ESCS 30	836858/0016	2017-12-02	2018-12-01
Rohde & Schwarz	L.I.S.N.	ENV216	100018	2017-05-20	2018-05-19
Rohde & Schwarz	RF Limiter	ESH3Z2	DE14781	2017-11-10	2018-11-09
Unknown	Conducted Cable	L-E003	000003	2017-11-10	2018-11-09
Rohde & Schwarz	EMC32	EMC32	V 8.52.0	N/A	N/A
Radiated Emission					
EMCT	Semi-Anechoic Chamber	966	001	2017-05-18	2020-05-17
Sonoma	Pre-Amplifier	310N	186684	2017-08-18	2018-08-17
Rohde & Schwarz	EMI Test Receiver	ESIB 40	100215	2017-09-12	2018-09-11
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2017-05-20	2018-05-19
A.H. Systems, Inc	Amplifier	PAM-0118P	467	2017-08-10	2018-08-09
EM Electronics	RF Pre-Amplifier	EM18G40	060725	2018-03-28	2019-03-27
SUNOL SCIENCES	Broadband Antenna	JB3	A121808	2017-05-19	2020-05-18
ETS	Horn Antenna	3115	003-6076	2017-05-19	2020-05-18
A.H. Systems, Inc	Horn Antenna	SAS-574	510	2017-05-19	2020-05-18
INMET	Attenuator	18N-6dB	64671	2017-11-10	2018-11-09
Sinoscite.,Co Ltd	Reject Band Filter	BSF5150-5850MN	0899V2	2017-11-10	2018-11-09
Unknown	RF Cable (below 1GHz)	L-E005	000005	2017-11-10	2018-11-09
Unknown	RF Cable (below 1GHz)	T-E128	000128	2017-11-10	2018-11-09
Unknown	RF Cable (below 1GHz)	T-E129	000129	2017-11-10	2018-11-09
Unknown	RF Cable (above 1GHz)	T-E069	000069	2017-11-10	2018-11-09
Micro-coax	RF Cable (above 1GHz)	T-E209	MFR 64639 2310	2018-03-14	2019-03-13
Rohde & Schwarz	EMC32	EMC32	V 8.52.0	N/A	N/A

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSEM30	100018	2017-05-18	2018-05-17
WEINSCHEL ENGINEERING	Attenuator	1A10dB	AA4135	2017-11-10	2018-11-09
Agilent	USB Wideband Power Sensor	U2021XA	MY53320008	2018-01-19	2019-01-18
E-Microwave	DC Block	EMDCB-00036	OE01304225	2017-12-09	2018-12-08
Unknown	RF Cable	No	000007	Each Time	/

*** Statement of Traceability:** BACL (Chengdu) attested that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

FCC §15.407(f) & §1.1310 & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart 15.407(f) and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Per 447498 D01 General RF Exposure Guidance v06, simultaneous transmission MPE test exclusion applies when the sum of the MPE for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modeled or measured field strengths or power density, is ≤ 1.0.

Calculated Formulary:

Predication of MPE limit at a given distance

$$S = PG/4\pi R^2$$

Where:
S = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \le 1$$

The rated tune-up output power and antenna gain in the below table:

Calculated Data:

MPE evaluation for single transmission:

Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
7265NGW WLAN Module								
WLAN	2412-2462	3.70	2.34	16.00	39.81	20	0.019	1.00
	5150-5250	3.70	2.34	15.50	35.48	20	0.017	1.00
	5725-5850	3.70	2.34	16.00	39.81	20	0.019	1.00
BT 3.0	2402-2480	3.70	2.34	5.50	3.55	20	0.002	1.00
BLE	2402-2480	3.70	2.34	3.00	2.00	20	0.001	1.00
8265NGW WLAN Module								
WLAN	2412-2462	3.70	2.34	15.00	31.62	20	0.015	1.00
	5150-5250	3.70	2.34	15.00	31.62	20	0.015	1.00
	5725-5850	3.70	2.34	15.50	35.48	20	0.017	1.00
BT 3.0	2402-2480	3.70	2.34	9.0	7.94	20	0.004	1.00
BLE	2402-2480	3.70	2.34	4.50	2.82	20	0.001	1.00
LTE Module (FCC ID: RI7LN940A)								
WCDMA Band 5	824-849	3.0	2.0	24	251.19	20	0.100	0.549
LTE Band 5	824-849	3.0	2.0	24	251.19	20	0.100	0.549
WCDMA Band 2	1850-1910	3.0	2.0	25	316.23	20	0.126	1.00
LTE Band 2	1850-1910	3.0	2.0	25	316.23	20	0.126	1.00
LTE Band 25	1850-1915	3.0	2.0	25	316.23	20	0.126	1.00
WCDMA Band 4	1710-1755	3.0	2.0	25	316.23	20	0.126	1.00
LTE Band 4	1710-1755	3.0	2.0	25	316.23	20	0.126	1.00
LTE Band 7	2500-2570	3.0	2.0	25	316.23	20	0.126	1.00
LTE Band 12	699-716	3.0	2.0	24	251.19	20	0.100	0.466
LTE Band 13	777-787	3.0	2.0	24	251.19	20	0.100	0.518
LTE Band 17	704-716	3.0	2.0	24	251.19	20	0.100	0.469
LTE Band 30	2305-2315	3.0	2.0	25	316.23	20	0.126	1.00
LTE Band 38	2570-2620	3.0	2.0	25	316.23	20	0.126	1.00
LTE Band 41	2496-2690	3.0	2.0	25	316.23	20	0.126	1.00
LTE Band 66	1710-1780	3.0	2.0	25	316.23	20	0.126	1.00
LTE Band 26	814-849	3.0	2.0	24	251.19	20	0.100	0.543

MPE evaluation for simultaneous transmission:

Note: 1. Two Wi-Fi module can transmit simultaneously.
2. The Wi-Fi(2.4G) or Wi-Fi(5G) and Bluetooth can not transmit simultaneously.
3. Wi-Fi or Bluetooth and WCDMA/LTE can transmit at the same time, MPE evaluation is as below formula:

PD1/Limit1+PD2/Limit2+……＜1, PD (Power Density)

The worst case is as below:

Max MPE of Wi-Fi(7265NGW) + Max MPE of Wi-Fi(8265NGW) +Max MPE of LTE
= 0.019/1.0+0.017/1.0+0.10/0.466 =0.251＜1.0

Result: MPE evaluation of single and simultaneous transmission meet the requirement of standard.

FCC §15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.
Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

Antenna Connector Construction

The EUT has six built-in antennas (two 2.4G/5G Wi-Fi/Bluetooth antennas, antenna gain is 3.7dBi; two 2.4G/5G Wi-Fi antennas, antenna gain is 3.7dBi; one LTE main antenna and one LTE diversity antenna, antenna gain is 3dBi), which connected to the main board with IPEX socket, fulfill the requirement of this section. Please refer to the EUT internal photo and below table for detail.

Antenna Information:

Module	Antenna	RF	Manufacturer	Model	Antenna Gain(Max)
7265NGW	1	2.4G /5G Wi-Fi/ BT3.0/BLE	Dongguan Fange Electronics	34.WF24581201	3.7dBi
	2	2.4G /5G Wi-Fi			
8265NGW	1	2.4G /5G Wi-Fi	Dongguan Fange Electronics	34.WF24581201	3.7dBi
	2	2.4G /5G Wi-Fi/ BT3.0/BLE			
LTE	Main	4G	Jinchang Electron	JCG142	3dBi
	Diversity	4G			

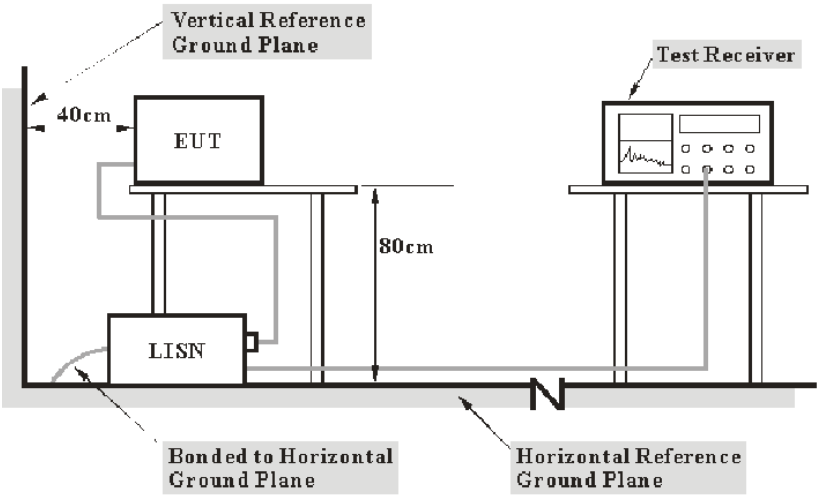
Result: Compliance.

FCC §15.407 (b) (6) §15.207 (a) – CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207, §15.407(b) (6)

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

The adapter was connected to AC 120V/60Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$V_C = V_R + A_C + VDF$
$C_f = A_C + VDF$

Herein,
V_C (cord. Reading): corrected voltage amplitude
V_R: reading voltage amplitude
A_c: attenuation caused by cable loss
VDF: voltage division factor of AMN
C_f: Correction Factor

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

Test Data

Environmental Conditions

Temperature:	23 °C
Relative Humidity:	46 %
ATM Pressure:	95.9 kPa

The testing was performed by Tom Tang on 2018-03-28.

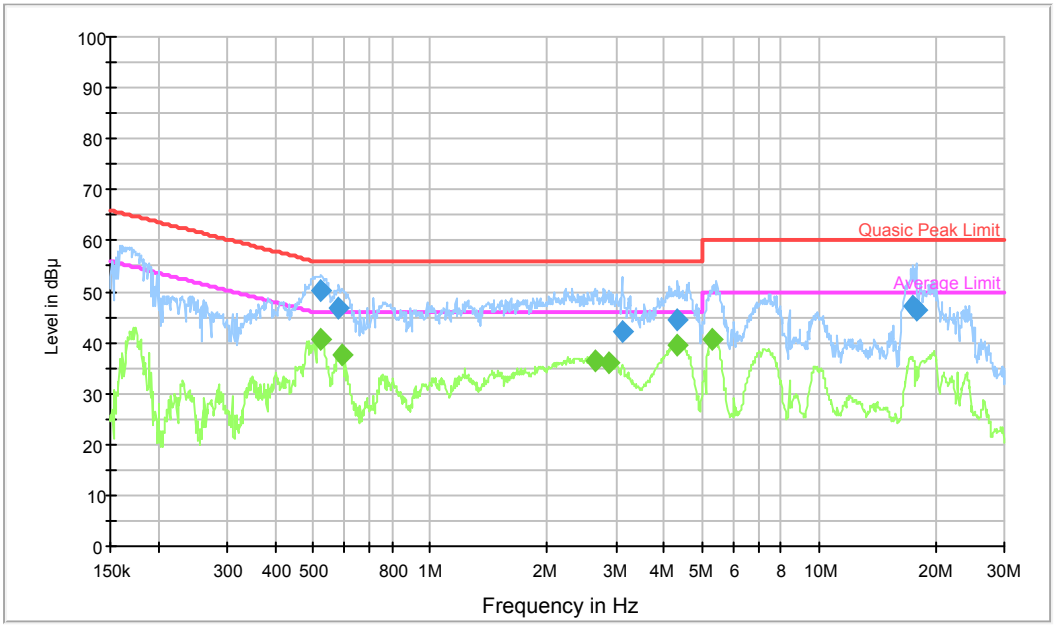
Test Mode: Transmitting

5725-5850MHz band: 802.11ac40-high channel - worst case

For 7265NGW Module

DC Input 1

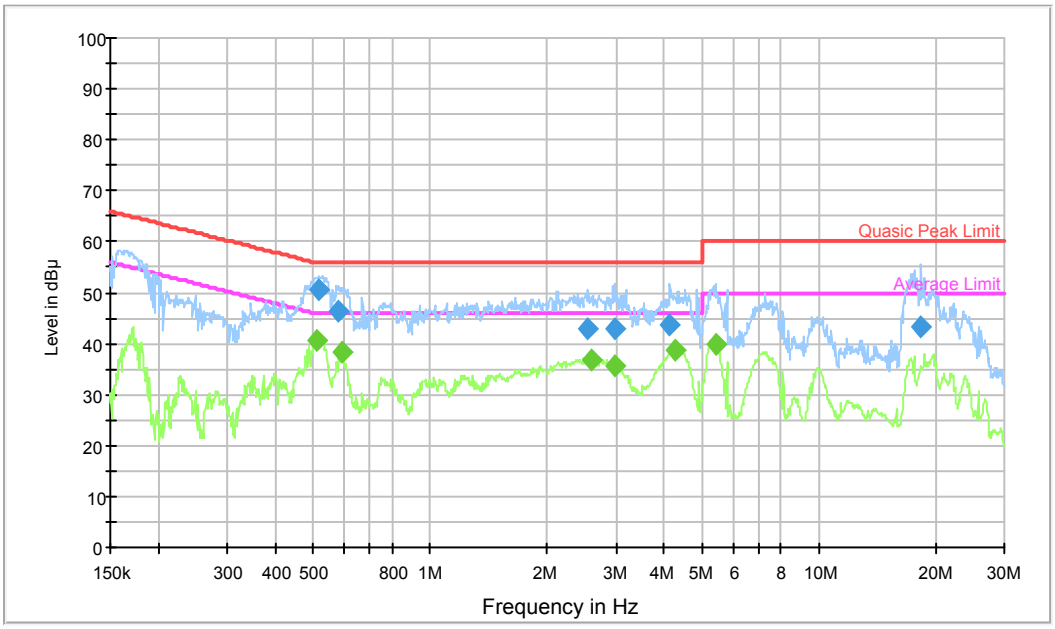
AC120V/60Hz, Line



Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.523291	50.1	200.0	9.000	L1	19.8	5.9	56.0
0.580524	46.9	200.0	9.000	L1	19.8	9.1	56.0
3.116831	42.3	200.0	9.000	L1	19.9	13.7	56.0
4.323921	44.6	200.0	9.000	L1	19.9	11.4	56.0
17.485466	47.0	200.0	9.000	L1	20.1	13.0	60.0
17.766917	46.2	200.0	9.000	L1	20.1	13.8	60.0

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.521207	40.7	200.0	9.000	L1	19.8	5.3	46.0
0.592228	37.4	200.0	9.000	L1	19.8	8.6	46.0
2.646251	36.6	200.0	9.000	L1	19.9	9.4	46.0
2.866192	36.0	200.0	9.000	L1	19.9	10.0	46.0
4.323921	39.6	200.0	9.000	L1	19.9	6.4	46.0
5.321460	40.7	200.0	9.000	L1	20.0	9.3	50.0

AC120V/60Hz, Neutral

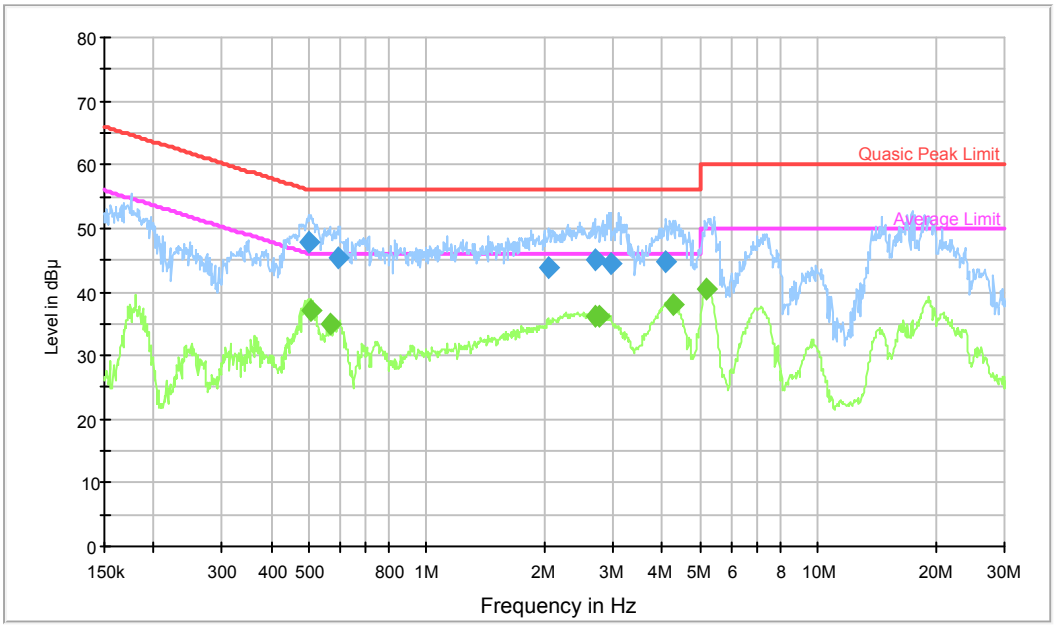


Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.517062	50.5	200.0	9.000	N	19.5	5.5	56.0
0.580524	46.5	200.0	9.000	N	19.5	9.5	56.0
2.542693	43.1	200.0	9.000	N	19.6	12.9	56.0
2.982926	43.0	200.0	9.000	N	19.6	13.0	56.0
4.138156	43.8	200.0	9.000	N	19.7	12.2	56.0
18.343482	43.3	200.0	9.000	N	19.9	16.7	60.0

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.510906	40.7	200.0	9.000	N	19.5	5.3	46.0
0.589868	38.5	200.0	9.000	N	19.5	7.5	46.0
2.583621	36.7	200.0	9.000	N	19.6	9.3	46.0
2.982926	35.7	200.0	9.000	N	19.6	10.3	46.0
4.272446	38.6	200.0	9.000	N	19.7	7.4	46.0
5.407116	39.8	200.0	9.000	N	19.7	10.2	50.0

DC Input 2

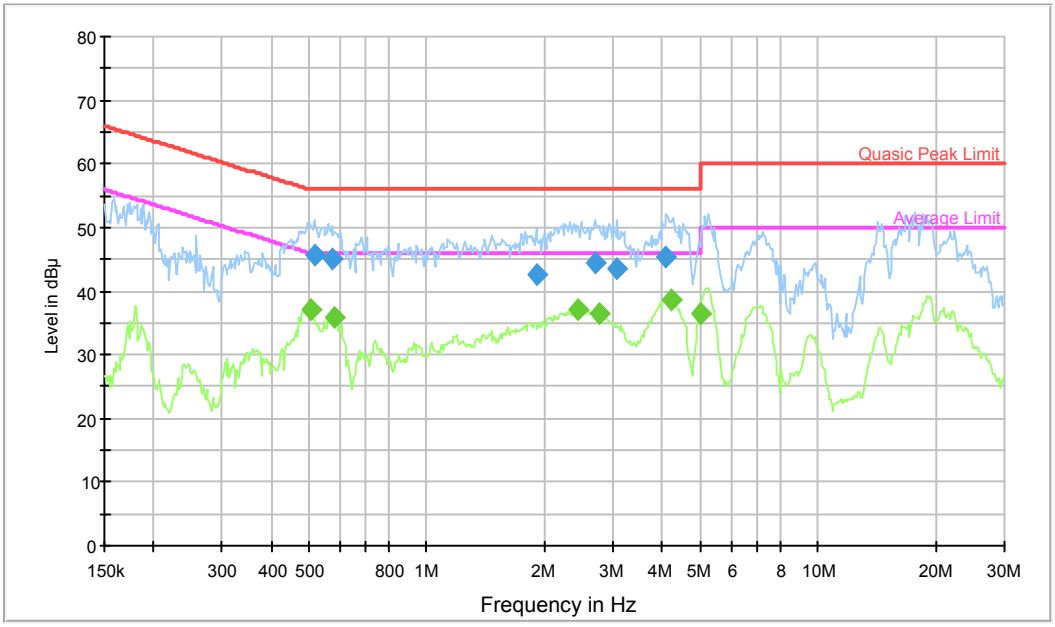
AC120V/60Hz, Line



Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.502813	47.8	200.0	9.000	L1	19.7	8.2	56.0
0.596975	45.3	200.0	9.000	L1	19.7	10.7	56.0
2.049620	43.7	200.0	9.000	L1	19.7	12.3	56.0
2.688846	45.0	200.0	9.000	L1	19.7	11.0	56.0
2.959205	44.4	200.0	9.000	L1	19.7	11.6	56.0
4.088893	44.8	200.0	9.000	L1	19.8	11.2	56.0

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.504824	37.1	200.0	9.000	L1	19.7	8.9	46.0
0.566784	34.9	200.0	9.000	L1	19.7	11.1	46.0
2.699601	36.2	200.0	9.000	L1	19.7	9.8	46.0
2.765043	36.0	200.0	9.000	L1	19.7	10.0	46.0
4.289536	37.9	200.0	9.000	L1	19.8	8.1	46.0
5.195514	40.3	200.0	9.000	L1	19.8	9.7	50.0

AC120V/60Hz, Neutral



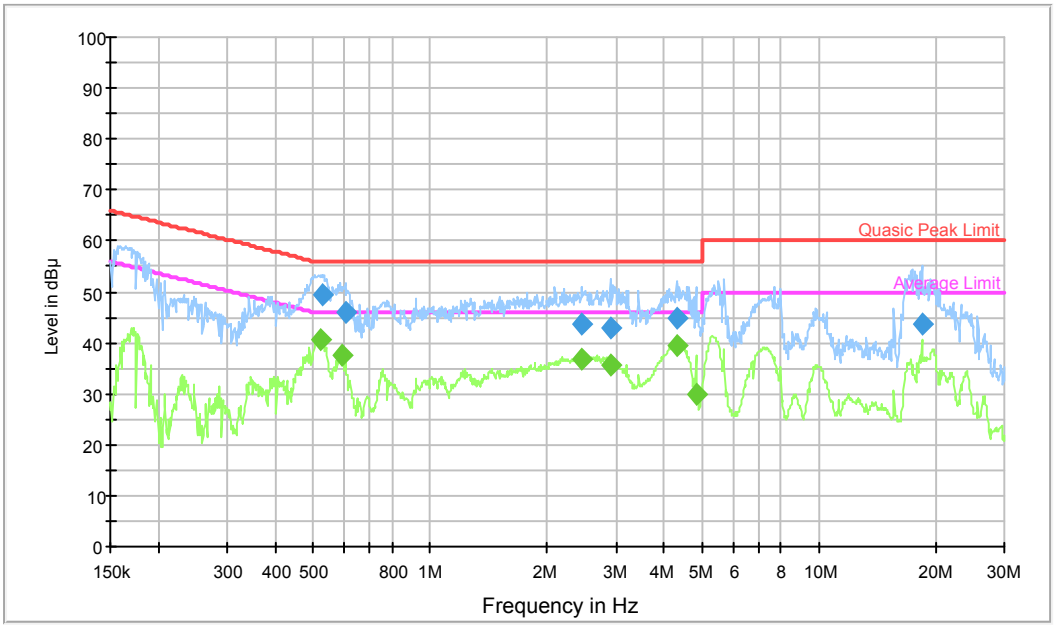
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.515791	45.8	200.0	9.000	N	19.7	10.2	56.0
0.572086	45.1	200.0	9.000	N	19.7	10.9	56.0
1.905466	42.7	200.0	9.000	N	19.7	13.3	56.0
2.684134	44.4	200.0	9.000	N	19.7	11.6	56.0
3.073500	43.7	200.0	9.000	N	19.7	12.3	56.0
4.094608	45.4	200.0	9.000	N	19.8	10.6	56.0

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.507637	37.2	200.0	9.000	N	19.7	8.8	46.0
0.581275	36.0	200.0	9.000	N	19.7	10.0	46.0
2.439371	37.0	200.0	9.000	N	19.7	9.0	46.0
2.771062	36.4	200.0	9.000	N	19.7	9.6	46.0
4.227217	38.6	200.0	9.000	N	19.8	7.4	46.0
4.997188	36.4	200.0	9.000	N	19.8	9.6	46.0

For 8265NGW Module

DC Input 1

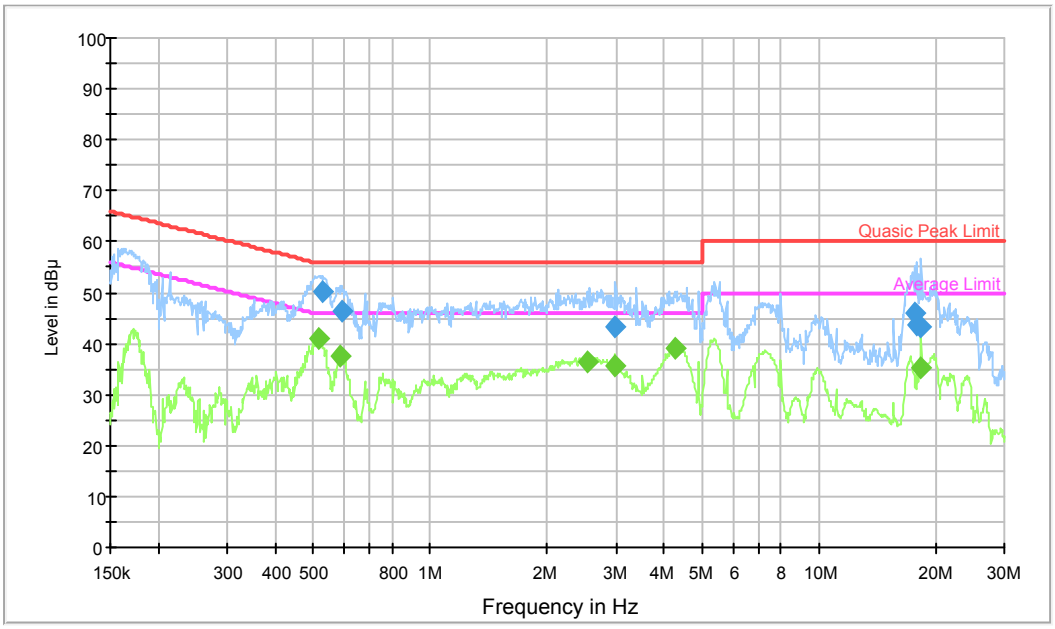
AC120V/60Hz, Line



Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.529596	49.5	200.0	9.000	L1	19.8	6.5	56.0
0.604167	46.0	200.0	9.000	L1	19.8	10.0	56.0
2.452960	43.5	200.0	9.000	L1	19.8	12.5	56.0
2.912327	42.9	200.0	9.000	L1	19.9	13.1	56.0
4.289536	44.7	200.0	9.000	L1	19.9	11.3	56.0
18.416856	43.8	200.0	9.000	L1	20.1	16.2	60.0

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.521207	40.8	200.0	9.000	L1	19.8	5.2	46.0
0.589868	37.7	200.0	9.000	L1	19.8	8.3	46.0
2.462772	36.8	200.0	9.000	L1	19.8	9.2	46.0
2.900724	35.8	200.0	9.000	L1	19.9	10.2	46.0
4.323921	39.6	200.0	9.000	L1	19.9	6.4	46.0
4.816017	30.0	200.0	9.000	L1	20.0	16.0	46.0

AC120V/60Hz, Neutral

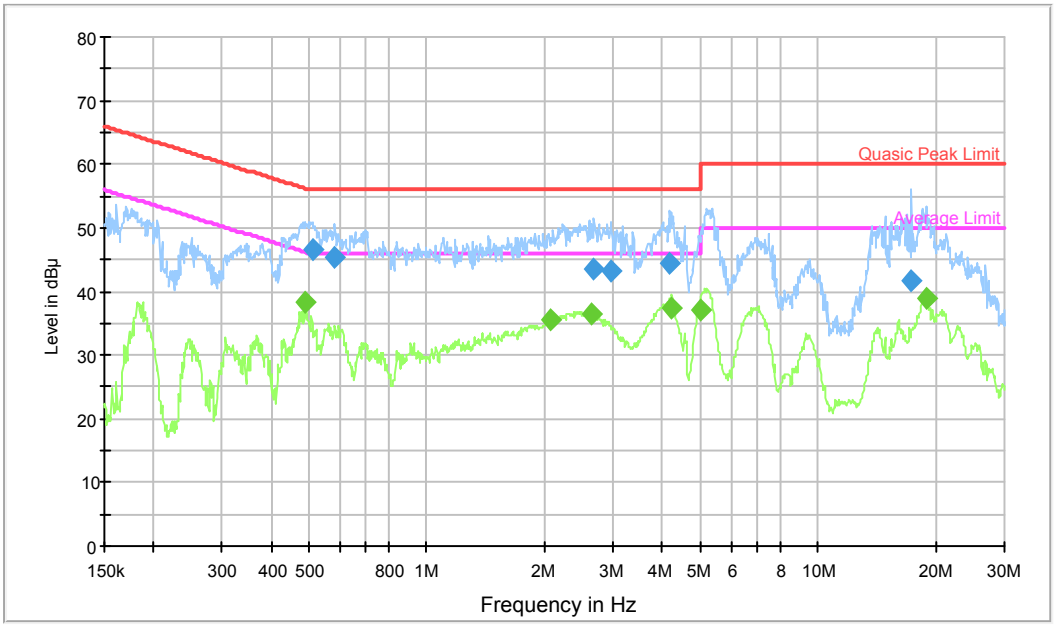


Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.527486	50.0	200.0	9.000	N	19.5	6.0	56.0
0.592228	46.6	200.0	9.000	N	19.5	9.4	56.0
2.994857	43.4	200.0	9.000	N	19.6	12.6	56.0
17.625630	46.0	200.0	9.000	N	19.9	14.0	60.0
17.837984	43.6	200.0	9.000	N	19.9	16.4	60.0
18.343482	43.1	200.0	9.000	N	19.9	16.9	60.0

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.517062	40.9	200.0	9.000	N	19.5	5.1	46.0
0.587518	37.5	200.0	9.000	N	19.5	8.5	46.0
2.542693	36.4	200.0	9.000	N	19.6	9.6	46.0
2.994857	35.4	200.0	9.000	N	19.6	10.6	46.0
4.255424	39.1	200.0	9.000	N	19.7	6.9	46.0
18.343482	35.3	200.0	9.000	N	19.9	14.7	50.0

DC Input 2

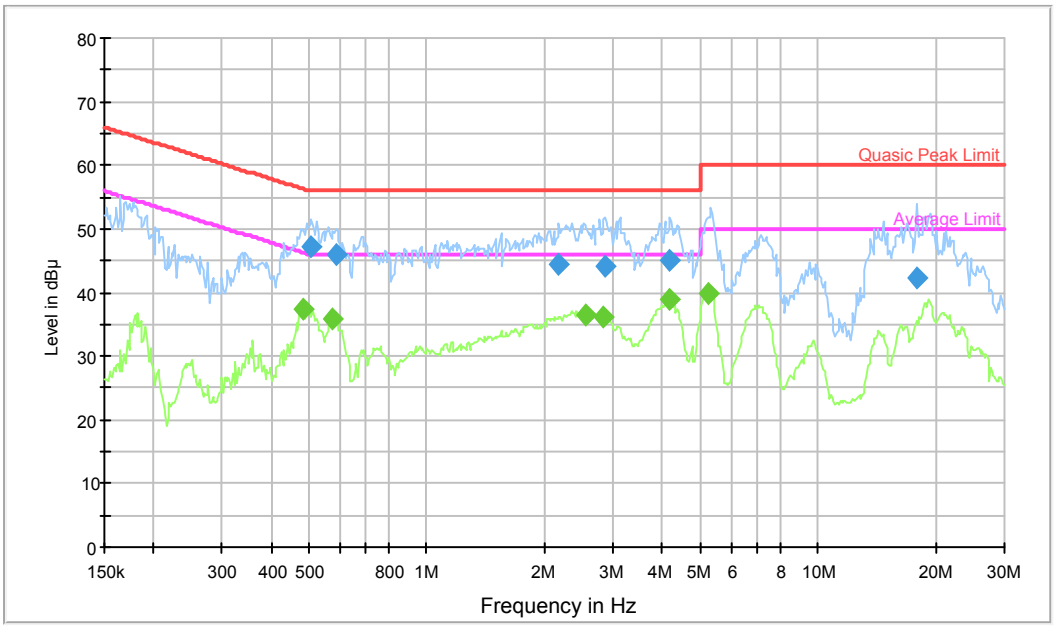
AC120V/60Hz, Line



Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.508871	46.4	200.0	9.000	L1	19.7	9.6	56.0
0.580524	45.4	200.0	9.000	L1	19.7	10.6	56.0
2.678133	43.6	200.0	9.000	L1	19.7	12.4	56.0
2.959205	43.2	200.0	9.000	L1	19.7	12.8	56.0
4.188013	44.3	200.0	9.000	L1	19.8	11.7	56.0
17.346417	41.7	200.0	9.000	L1	20.1	18.3	60.0

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.490913	38.3	200.0	9.000	L1	19.7	7.8	46.2
2.074314	35.5	200.0	9.000	L1	19.7	10.5	46.0
2.646251	36.5	200.0	9.000	L1	19.7	9.5	46.0
4.238471	37.5	200.0	9.000	L1	19.8	8.5	46.0
4.992193	37.0	200.0	9.000	L1	19.8	9.0	46.0
18.938757	38.8	200.0	9.000	L1	20.1	11.2	50.0

AC120V/60Hz, Neutral



Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.507637	47.2	200.0	9.000	N	19.7	8.8	56.0
0.585926	45.9	200.0	9.000	N	19.7	10.1	56.0
2.181877	44.4	200.0	9.000	N	19.7	11.6	56.0
2.860806	44.0	200.0	9.000	N	19.7	12.0	56.0
4.193667	45.2	200.0	9.000	N	19.8	10.8	56.0
17.881783	42.3	200.0	9.000	N	20.1	17.7	60.0

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corrected Factor (dB)	Margin (dB)	Limit (dBµV)
0.483938	37.3	200.0	9.000	N	19.7	9.0	46.3
0.572086	35.9	200.0	9.000	N	19.7	10.1	46.0
2.538519	36.6	200.0	9.000	N	19.7	9.4	46.0
2.838101	36.0	200.0	9.000	N	19.7	10.0	46.0
4.160384	38.8	200.0	9.000	N	19.8	7.2	46.0
5.241902	39.9	200.0	9.000	N	19.8	10.1	50.0

Note:
1) Corrected Amplitude = Reading + Correction Factor
2) Correction Factor =LISN VDF (Voltage Division Factor) + Cable Loss + Transient Limiter
3) Margin = Limit – Corrected Amplitude

FCC §15.209, §15.205 & §15.407(b) (1) (4)(i) (6) (7) – UNDESIRABLE EMISSION, RESTRICTED BANDS

Applicable Standard

FCC §15.407 (b) (1) (4)(i), (6), (7); §15.209; §15.205

FCC 15.407 (b)

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:
(i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

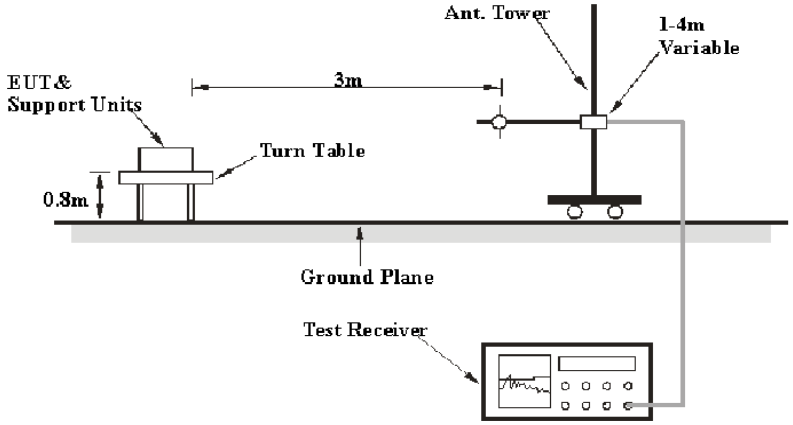
(7) The provisions of §15.205 apply to intentional radiators operating under this section.

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as:
E[dBuV/m] = EIRP[dBm] + 95.2, for d = 3 meters.

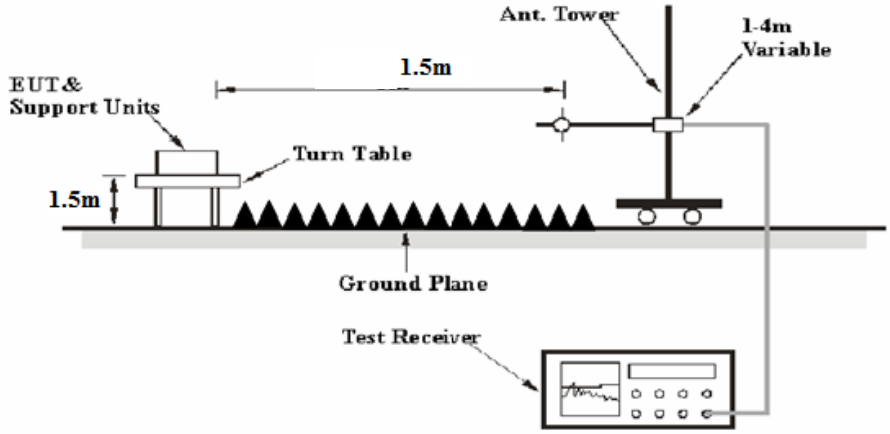
1) For 75 MHz above or below the band edge, a level of -27 dBm/MHz (68.2dBμV/m) was applied.
2) For 25MHz-75 MHz above or below the band edge, a level of 10 dBm/MHz (105.2dBμV/m) was applied.
3) For 5MHz-25 MHz above or below the band edge, a level of 15.6 dBm/MHz (110.8dBμV/m) was applied.
4) For 0 MHz-5 MHz above or below the band edge, a level of 27 dBm/MHz (122.2dBμV/m) was applied.

EUT Setup

Below 1GHz:



Above 1 GHz:



The radiated emission tests were performed in the 3 meters semi-anechoic chamber, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

The adapter was connected to AC 120V/60Hz power source.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver Setup was set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP

Frequency Range	RBW	Video B/W	Duty Cycle	Measurement
Above 1 GHz	1MHz	3 MHz	Any	PK
	1MHz	10Hz	>98%	AV
	1MHz	1/T	<98%	AV

Note: T is Transmission Duration

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1 GHz.

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: E [dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.

According to C63.10, the above 1G test result shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade from 3m to 1.5m
Distance extrapolation factor =20 log (specific distance [3m]/test distance [1.5m]) dB
Extrapolation result = Corrected Amplitude (dBμV/m) - distance extrapolation factor (6dB)

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Receiver Reading + Cable loss + Antenna Factor – Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit-Corrected Amplitude

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, Section 15.205 and 15.209, Subpart E, Section 15.407.

Test Data

Environmental Conditions

Temperature:	24 ~ 27 °C
Relative Humidity:	40 ~ 60 %
ATM Pressure:	94.8 ~ 95.2 kPa

The testing was performed by Tom Tang from 2018-04-10 to 2018-04-12.

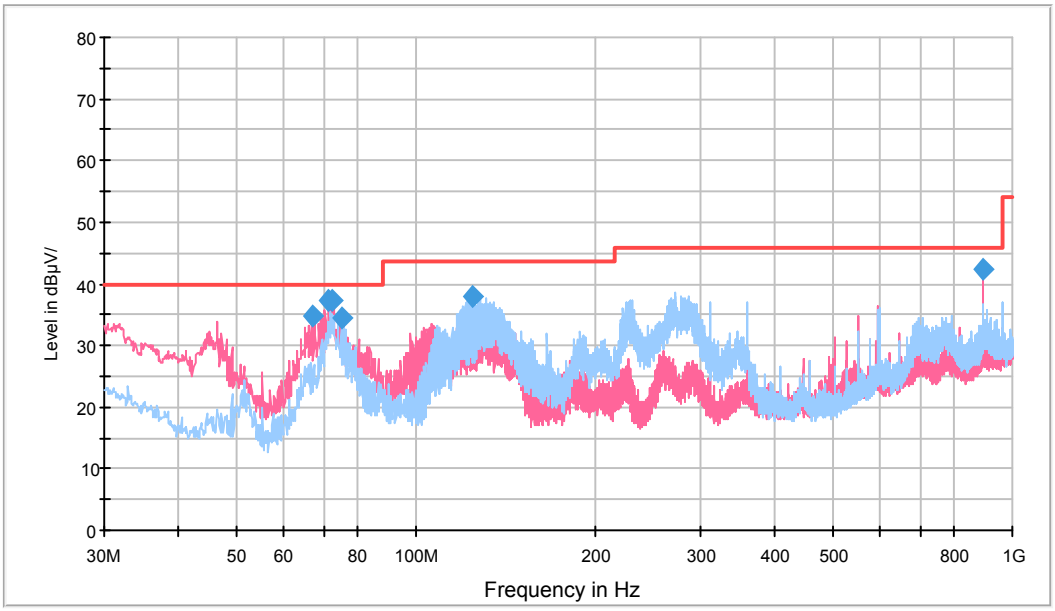
Test mode: Transmitting

For 7265NGW Module

1) 30 MHz to 1 GHz:

5725-5850MHz band: 802.11ac40-high channel - worst case

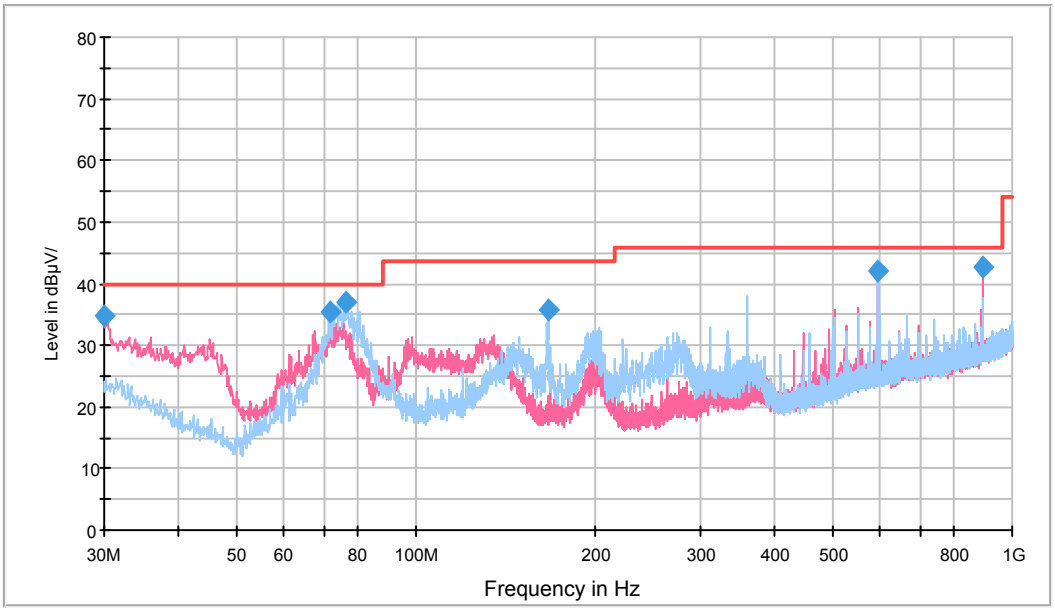
DC Input 1



Frequency (MHz)	QuasicPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)	Corrected Factor (dB/m)	Margin (dB)	Limit (dBµV/m)
66.860000	34.8	100.0	V	98.0	-16.8	5.2	40.0
71.467500	37.4	100.0	V	61.0	-16.6	*2.6	40.0
72.195000	37.3	100.0	V	4.0	-16.6	*2.7	40.0
74.862500	34.6	100.0	V	61.0	-16.6	5.4	40.0
124.817500	38.1	100.0	H	284.0	-11.4	5.4	43.5
890.996250	42.3	100.0	V	195.0	-0.2	*3.7	46.0

**Within measurement uncertainty!*

DC Input 2



Frequency (MHz)	QuasicPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)	Corrected Factor (dB/m)	Margin (dB)	Limit (dBµV/m)
30.000000	34.8	100.0	V	353.0	-4.8	5.2	40.0
72.001000	35.5	100.0	H	357.0	-16.6	*4.5	40.0
76.463000	37.0	100.0	H	345.0	-16.6	*3.0	40.0
166.576000	35.7	100.0	H	92.0	-12.1	7.8	43.5
593.958000	42.1	100.0	V	0.0	-4.4	*3.9	46.0
891.069000	42.6	100.0	V	16.0	-0.2	*3.4	46.0

**Within measurement uncertainty!*

2) 1GHz-40GHz

(Note: Above 1GHz was performed at distance 1.5m)

For 5150-5250 MHz:

For 802.11a mode (SISO) (Antenna 1-Worst Case)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5180 MHz										
5180	73.23	PK	H	34.51	4.54	0.00	112.28	106.28	N/A	N/A
5180	62.71	AV	H	34.51	4.54	0.00	101.76	95.76	N/A	N/A
5180	72.01	PK	V	34.51	4.54	0.00	111.06	105.06	N/A	N/A
5180	62.18	AV	V	34.51	4.54	0.00	101.23	95.23	N/A	N/A
5150	31.12	PK	H	34.49	4.53	0.00	70.14	64.14	74.00	9.86
5150	19.05	AV	H	34.49	4.53	0.00	58.07	52.07	54.00	*1.93
10360	46.07	PK	H	38.67	6.52	44.50	46.76	40.76	74.00	33.24
10360	33.24	AV	H	38.67	6.52	44.50	33.93	27.93	54.00	26.07
Frequency: 5200 MHz										
5200	71.94	PK	H	34.52	4.55	0.00	111.01	105.01	N/A	N/A
5200	61.58	AV	H	34.52	4.55	0.00	100.65	94.65	N/A	N/A
5200	70.65	PK	V	34.52	4.55	0.00	109.72	103.72	N/A	N/A
5200	60.66	AV	V	34.52	4.55	0.00	99.73	93.73	N/A	N/A
10400	45.96	PK	H	38.68	6.53	44.53	46.64	40.64	74.00	33.36
10400	32.92	AV	H	38.68	6.53	44.53	33.60	27.60	54.00	26.40
Frequency: 5240 MHz										
5240	70.95	PK	H	34.54	4.57	0.00	110.06	104.06	N/A	N/A
5240	61.06	AV	H	34.54	4.57	0.00	100.17	94.17	N/A	N/A
5240	69.72	PK	V	34.54	4.57	0.00	108.83	102.83	N/A	N/A
5240	59.23	AV	V	34.54	4.57	0.00	98.34	92.34	N/A	N/A
5350	29.14	PK	H	34.61	4.62	0.00	68.37	62.37	74.00	11.63
5350	17.82	AV	H	34.61	4.62	0.00	57.05	51.05	54.00	*2.95
10480	45.89	PK	H	38.70	6.55	44.59	46.55	40.55	74.00	33.45
10480	32.97	AV	H	38.70	6.55	44.59	33.63	27.63	54.00	26.37

**Within measurement uncertainty!*

For 802.11n-HT20 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5180 MHz										
5180	69.54	PK	H	34.51	4.54	0.00	108.59	102.59	N/A	N/A
5180	59.25	AV	H	34.51	4.54	0.00	98.30	92.30	N/A	N/A
5180	68.86	PK	V	34.51	4.54	0.00	107.91	101.91	N/A	N/A
5180	58.15	AV	V	34.51	4.54	0.00	97.20	91.20	N/A	N/A
5150	29.96	PK	H	34.49	4.53	0.00	68.98	62.98	74.00	11.02
5150	18.18	AV	H	34.49	4.53	0.00	57.20	51.20	54.00	*2.80
10360	44.68	PK	H	38.67	6.52	44.50	45.37	39.37	74.00	34.63
10360	32.19	AV	H	38.67	6.52	44.50	32.88	26.88	54.00	27.12
Frequency: 5200 MHz										
5200	68.58	PK	H	34.52	4.55	0.00	107.65	101.65	N/A	N/A
5200	58.06	AV	H	34.52	4.55	0.00	97.13	91.13	N/A	N/A
5200	67.17	PK	V	34.52	4.55	0.00	106.24	100.24	N/A	N/A
5200	57.36	AV	V	34.52	4.55	0.00	96.43	90.43	N/A	N/A
10400	44.75	PK	H	38.68	6.53	44.53	45.43	39.43	74.00	34.57
10400	32.31	AV	H	38.68	6.53	44.53	32.99	26.99	54.00	27.01
Frequency: 5240 MHz										
5240	67.91	PK	H	34.54	4.57	0.00	107.02	101.02	N/A	N/A
5240	56.94	AV	H	34.54	4.57	0.00	96.05	90.05	N/A	N/A
5240	65.95	PK	V	34.54	4.57	0.00	105.06	99.06	N/A	N/A
5240	56.86	AV	V	34.54	4.57	0.00	95.97	89.97	N/A	N/A
5350	28.93	PK	H	34.61	4.62	0.00	68.16	62.16	74.00	11.84
5350	17.81	AV	H	34.61	4.62	0.00	57.04	51.04	54.00	*2.96
10480	44.97	PK	H	38.70	6.55	44.59	45.63	39.63	74.00	34.37
10480	32.87	AV	H	38.70	6.55	44.59	33.53	27.53	54.00	26.47

**Within measurement uncertainty!*

For 802.11n-HT40 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5190 MHz										
5190	69.07	PK	H	34.51	4.55	0.00	108.13	102.13	N/A	N/A
5190	58.74	AV	H	34.51	4.55	0.00	97.80	91.80	N/A	N/A
5190	67.14	PK	V	34.51	4.55	0.00	106.20	100.20	N/A	N/A
5190	57.19	AV	V	34.51	4.55	0.00	96.25	90.25	N/A	N/A
5150	30.39	PK	H	34.49	4.53	0.00	69.41	63.41	74.00	10.59
5150	18.02	AV	H	34.49	4.53	0.00	57.04	51.04	54.00	*2.96
10380	44.59	PK	H	38.68	6.52	44.52	45.27	39.27	74.00	34.73
10380	32.57	AV	H	38.68	6.52	44.52	33.25	27.25	54.00	26.75
Frequency: 5230 MHz										
5230	67.16	PK	H	34.54	4.57	0.00	106.27	100.27	N/A	N/A
5230	57.24	AV	H	34.54	4.57	0.00	96.35	90.35	N/A	N/A
5230	65.89	PK	V	34.54	4.57	0.00	105.00	99.00	N/A	N/A
5230	55.47	AV	V	34.54	4.57	0.00	94.58	88.58	N/A	N/A
5350	29.92	PK	H	34.61	4.62	0.00	69.15	63.15	74.00	10.85
5350	17.76	AV	H	34.61	4.62	0.00	56.99	50.99	54.00	*3.01
10460	43.97	PK	H	38.69	6.55	44.57	44.64	38.64	74.00	35.36
10460	32.07	AV	H	38.69	6.55	44.57	32.74	26.74	54.00	27.26

**Within measurement uncertainty!*

For 802.11ac20 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5180 MHz										
5180	71.42	PK	H	34.51	4.54	0.00	110.47	104.47	N/A	N/A
5180	60.47	AV	H	34.51	4.54	0.00	99.52	93.52	N/A	N/A
5180	70.21	PK	V	34.51	4.54	0.00	109.26	103.26	N/A	N/A
5180	59.81	AV	V	34.51	4.54	0.00	98.86	92.86	N/A	N/A
5150	30.05	PK	H	34.49	4.53	0.00	69.07	63.07	74.00	10.93
5150	18.38	AV	H	34.49	4.53	0.00	57.40	51.40	54.00	*2.60
10360	44.93	PK	H	38.67	6.52	44.50	45.62	39.62	74.00	34.38
10360	32.03	AV	H	38.67	6.52	44.50	32.72	26.72	54.00	27.28
Frequency: 5200 MHz										
5200	70.23	PK	H	34.52	4.55	0.00	109.30	103.30	N/A	N/A
5200	59.46	AV	H	34.52	4.55	0.00	98.53	92.53	N/A	N/A
5200	69.04	PK	V	34.52	4.55	0.00	108.11	102.11	N/A	N/A
5200	58.50	AV	V	34.52	4.55	0.00	97.57	91.57	N/A	N/A
10400	45.09	PK	H	38.68	6.53	44.53	45.77	39.77	74.00	34.23
10400	32.22	AV	H	38.68	6.53	44.53	32.90	26.90	54.00	27.10
Frequency: 5240 MHz										
5240	68.61	PK	H	34.54	4.57	0.00	107.72	101.72	N/A	N/A
5240	58.01	AV	H	34.54	4.57	0.00	97.12	91.12	N/A	N/A
5240	67.47	PK	V	34.54	4.57	0.00	106.58	100.58	N/A	N/A
5240	56.63	AV	V	34.54	4.57	0.00	95.74	89.74	N/A	N/A
5350	30.63	PK	H	34.61	4.62	0.00	69.86	63.86	74.00	10.14
5350	17.81	AV	H	34.61	4.62	0.00	57.04	51.04	54.00	*2.96
10480	44.76	PK	H	38.70	6.55	44.59	45.42	39.42	74.00	34.58
10480	31.89	AV	H	38.70	6.55	44.59	32.55	26.55	54.00	27.45

**Within measurement uncertainty!*

For 802.11ac40 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5190 MHz										
5190	68.06	PK	H	34.51	4.55	0.00	107.12	101.12	N/A	N/A
5190	57.73	AV	H	34.51	4.55	0.00	96.79	90.79	N/A	N/A
5190	66.57	PK	V	34.51	4.55	0.00	105.63	99.63	N/A	N/A
5190	56.88	AV	V	34.51	4.55	0.00	95.94	89.94	N/A	N/A
5150	30.27	PK	H	34.49	4.53	0.00	69.29	63.29	74.00	10.71
5150	18.72	AV	H	34.49	4.53	0.00	57.74	51.74	54.00	*2.26
10380	44.03	PK	H	38.68	6.52	44.52	44.71	38.71	74.00	35.29
10380	32.13	AV	H	38.68	6.52	44.52	32.81	26.81	54.00	27.19
Frequency: 5230 MHz										
5230	65.74	PK	H	34.54	4.57	0.00	104.85	98.85	N/A	N/A
5230	54.28	AV	H	34.54	4.57	0.00	93.39	87.39	N/A	N/A
5230	64.29	PK	V	34.54	4.57	0.00	103.40	97.40	N/A	N/A
5230	53.07	AV	V	34.54	4.57	0.00	92.18	86.18	N/A	N/A
5350	28.86	PK	H	34.61	4.62	0.00	68.09	62.09	74.00	11.91
5350	17.71	AV	H	34.61	4.62	0.00	56.94	50.94	54.00	*3.06
10460	43.97	PK	H	38.69	6.55	44.57	44.64	38.64	74.00	35.36
10460	32.17	AV	H	38.69	6.55	44.57	32.84	26.84	54.00	27.16

**Within measurement uncertainty!*

For 802.11ac80 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5210 MHz										
5210	66.94	PK	H	34.53	4.56	0.00	106.03	100.03	N/A	N/A
5210	55.93	AV	H	34.53	4.56	0.00	95.02	89.02	N/A	N/A
5210	64.27	PK	V	34.53	4.56	0.00	103.36	97.36	N/A	N/A
5210	52.42	AV	V	34.53	4.56	0.00	91.51	85.51	N/A	N/A
5150	31.97	PK	H	34.49	4.53	0.00	70.99	64.99	74.00	9.01
5150	19.68	AV	H	34.49	4.53	0.00	58.70	52.70	54.00	*1.30
5350	29.88	PK	H	34.61	4.62	0.00	69.11	63.11	74.00	10.89
5350	17.81	AV	H	34.61	4.62	0.00	57.04	51.04	54.00	*2.96
10420	44.35	PK	H	38.68	6.54	44.55	45.02	39.02	74.00	34.98
10420	32.59	AV	H	38.68	6.54	44.55	33.26	27.26	54.00	26.74

**Within measurement uncertainty!*

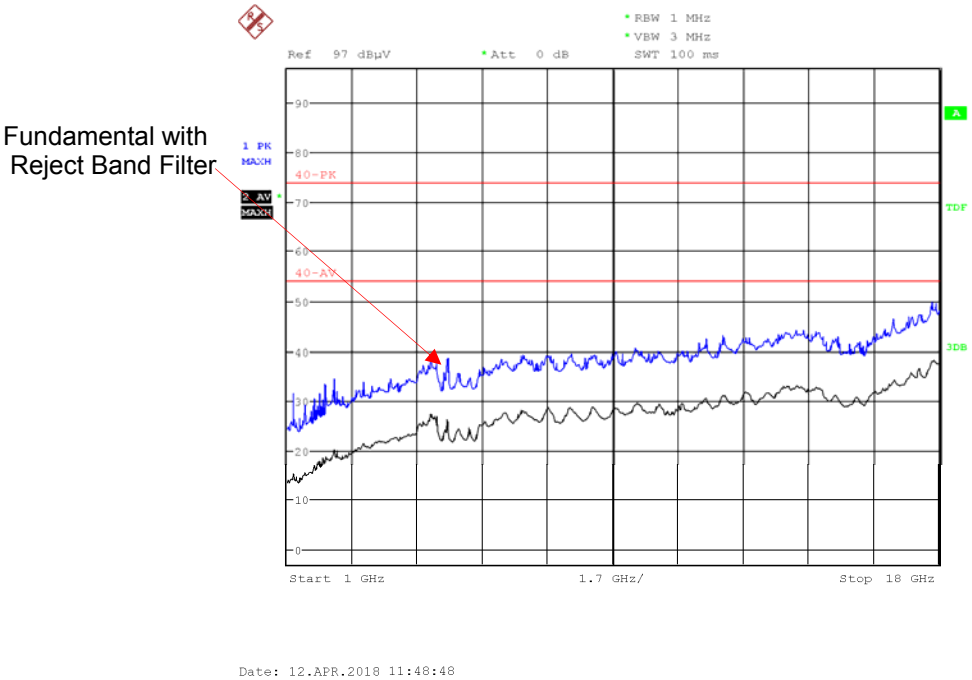
Note:
Corrected Amplitude = Corrected Factor + Reading
Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Margin = Limit- Corr. Amplitude

Spurious emissions more than 20 dB below the limit were not reported.

Please refer to the below pre-scan plot of worst case:

Note: The test distance is 1.5m and distance factor add to the total factor.

802.11ac80 Mode: High Channel_Horizontal_1GHz-18GHz



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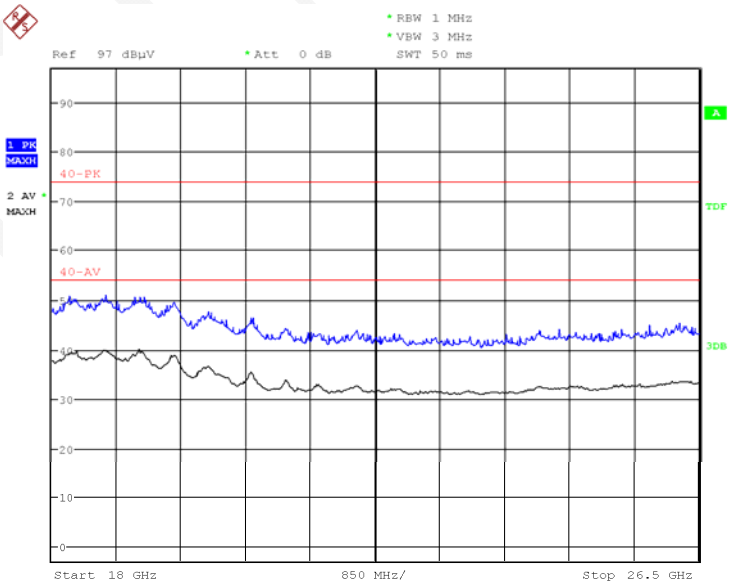
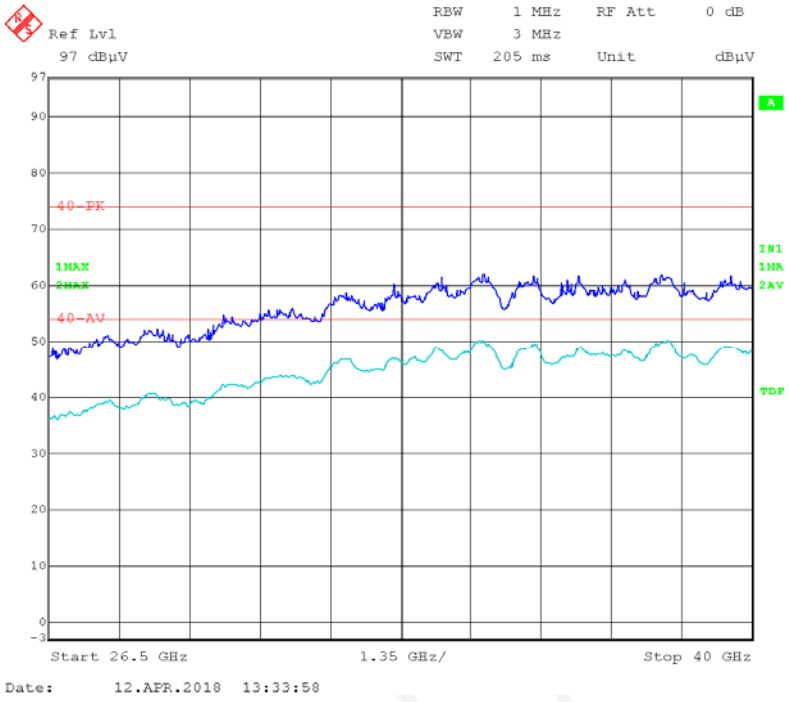
802.11ac80 Mode: High Channel_Horizontal_18GHz-26.5GHz



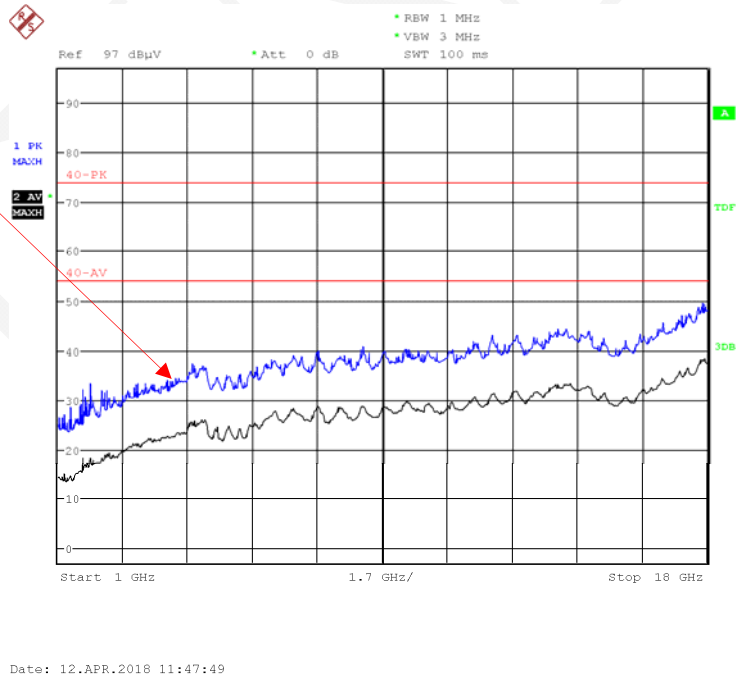
Date: 12.APR.2018 11:02:53

802.11ac80 Mode: High Channel_Horizontal_26.5GHz-40GHz

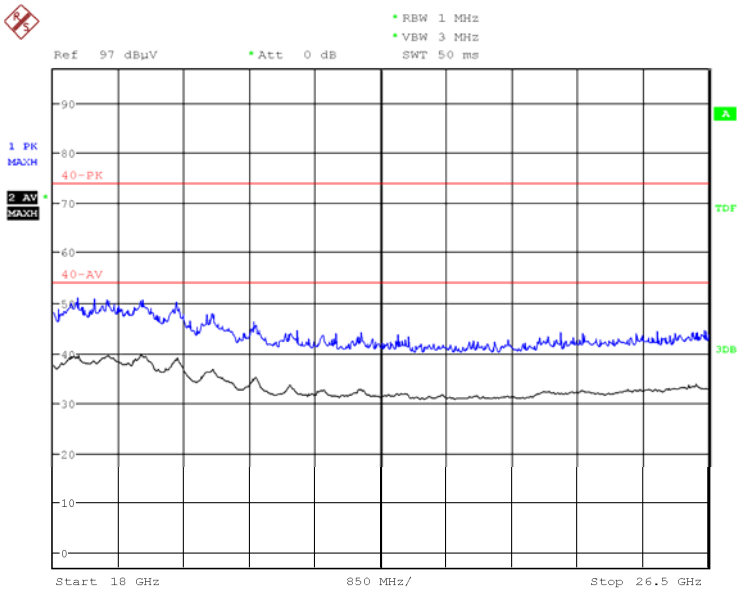


802.11ac80 Mode: High Channel_Vertical_1GHz-18GHz

Fundamental with Reject Band Filter

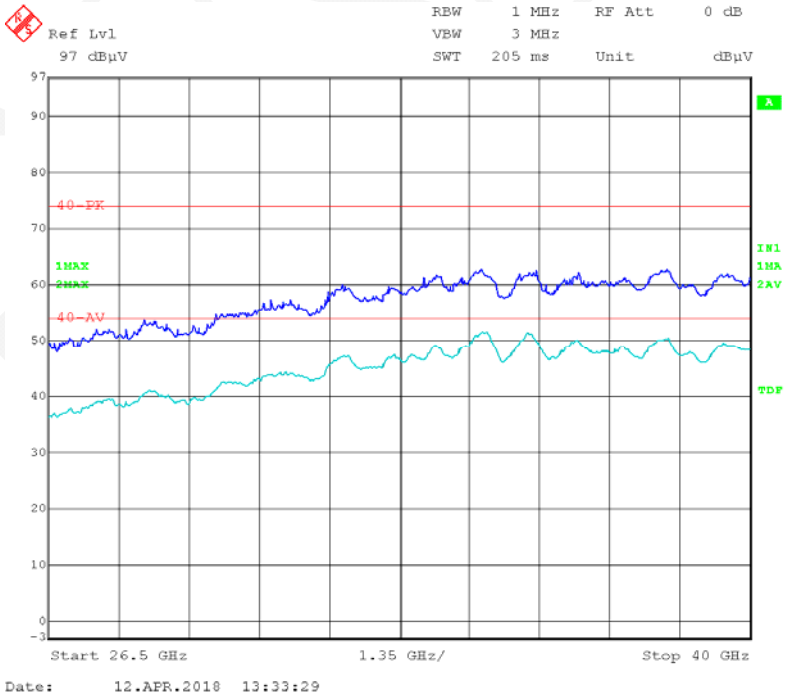


802.11ac80 Mode: High Channel_Vertical_18GHz-26.5GHz



Date: 12.APR.2018 11:05:11

802.11ac80 Mode: High Channel_Vertical_26.5GHz-40GHz



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For 5725-5850 MHz

For 802.11a mode (SISO) (Antenna 1-Worst Case)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5745 MHz										
5745	74.71	PK	H	34.75	4.81	0.00	114.27	108.27	N/A	N/A
5745	64.95	AV	H	34.75	4.81	0.00	104.51	98.51	N/A	N/A
5745	72.43	PK	V	34.75	4.81	0.00	111.99	105.99	N/A	N/A
5745	62.32	AV	V	34.75	4.81	0.00	101.88	95.88	N/A	N/A
5650	27.26	PK	H	34.73	4.76	0.00	66.75	60.75	68.20	7.45
5700	29.84	PK	H	34.74	4.79	0.00	69.37	63.37	105.20	41.83
5720	36.43	PK	H	34.74	4.80	0.00	75.97	69.97	110.80	40.83
5725	45.31	PK	H	34.75	4.80	0.00	84.86	78.86	122.20	43.34
11490	45.98	PK	H	38.90	6.89	44.64	47.13	41.13	74.00	32.87
11490	32.64	AV	H	38.90	6.89	44.64	33.79	27.79	54.00	26.21
Frequency: 5785 MHz										
5785	74.39	PK	H	34.76	4.83	0.00	113.98	107.98	N/A	N/A
5785	64.57	AV	H	34.76	4.83	0.00	104.16	98.16	N/A	N/A
5785	71.60	PK	V	34.76	4.83	0.00	111.19	105.19	N/A	N/A
5785	61.42	AV	V	34.76	4.83	0.00	101.01	95.01	N/A	N/A
11570	46.22	PK	H	38.91	6.91	44.46	47.58	41.58	74.00	32.42
11570	32.88	AV	H	38.91	6.91	44.46	34.24	28.24	54.00	25.76
Frequency: 5825 MHz										
5825	74.96	PK	H	34.77	4.85	0.00	114.58	108.58	N/A	N/A
5825	64.87	AV	H	34.77	4.85	0.00	104.49	98.49	N/A	N/A
5825	71.44	PK	V	34.77	4.85	0.00	111.06	105.06	N/A	N/A
5825	61.22	AV	V	34.77	4.85	0.00	100.84	94.84	N/A	N/A
5850	34.91	PK	H	34.77	4.86	0.00	74.54	68.54	122.20	53.66
5855	33.66	PK	H	34.77	4.86	0.00	73.29	67.29	110.80	43.51
5875	28.28	PK	H	34.78	4.87	0.00	67.93	61.93	105.20	43.27
5925	27.37	PK	H	34.79	4.89	0.00	67.05	61.05	68.20	7.15
11650	46.81	PK	H	38.93	6.94	44.27	48.41	42.41	74.00	31.59
11650	33.41	AV	H	38.93	6.94	44.27	35.01	29.01	54.00	24.99

For 802.11n-HT20 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5745 MHz										
5745	73.76	PK	H	34.75	4.81	0.00	113.32	107.32	N/A	N/A
5745	62.53	AV	H	34.75	4.81	0.00	102.09	96.09	N/A	N/A
5745	73.31	PK	V	34.75	4.81	0.00	112.87	106.87	N/A	N/A
5745	64.15	AV	V	34.75	4.81	0.00	103.71	97.71	N/A	N/A
5650	26.57	PK	H	34.73	4.76	0.00	66.06	60.06	68.20	8.14
5700	26.88	PK	H	34.74	4.79	0.00	66.41	60.41	105.20	44.79
5720	30.74	PK	H	34.74	4.80	0.00	70.28	64.28	110.80	46.52
5725	35.21	PK	H	34.75	4.80	0.00	74.76	68.76	122.20	53.44
11490	45.79	PK	H	38.90	6.89	44.64	46.94	40.94	74.00	33.06
11490	32.37	AV	H	38.90	6.89	44.64	33.52	27.52	54.00	26.48
Frequency: 5785 MHz										
5785	73.86	PK	H	34.76	4.83	0.00	113.45	107.45	N/A	N/A
5785	63.48	AV	H	34.76	4.83	0.00	103.07	97.07	N/A	N/A
5785	73.02	PK	V	34.76	4.83	0.00	112.61	106.61	N/A	N/A
5785	63.43	AV	V	34.76	4.83	0.00	103.02	97.02	N/A	N/A
11570	45.89	PK	H	38.91	6.91	44.46	47.25	41.25	74.00	32.75
11570	32.55	AV	H	38.91	6.91	44.46	33.91	27.91	54.00	26.09
Frequency: 5825 MHz										
5825	74.26	PK	H	34.77	4.85	0.00	113.88	107.88	N/A	N/A
5825	64.43	AV	H	34.77	4.85	0.00	104.05	98.05	N/A	N/A
5825	73.08	PK	V	34.77	4.85	0.00	112.70	106.70	N/A	N/A
5825	62.91	AV	V	34.77	4.85	0.00	102.53	96.53	N/A	N/A
5850	31.43	PK	H	34.77	4.86	0.00	71.06	65.06	122.20	57.14
5855	29.04	PK	H	34.77	4.86	0.00	68.67	62.67	110.80	48.13
5875	27.92	PK	H	34.78	4.87	0.00	67.57	61.57	105.20	43.63
5925	26.79	PK	H	34.79	4.89	0.00	66.47	60.47	68.20	7.73
11650	46.02	PK	H	38.93	6.94	44.27	47.62	41.62	74.00	32.38
11650	32.95	AV	H	38.93	6.94	44.27	34.55	28.55	54.00	25.45

For 802.11n-HT40 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5755 MHz										
5755	71.16	PK	H	34.75	4.81	0.00	110.72	104.72	N/A	N/A
5755	60.51	AV	H	34.75	4.81	0.00	100.07	94.07	N/A	N/A
5755	69.28	PK	V	34.75	4.81	0.00	108.84	102.84	N/A	N/A
5755	58.55	AV	V	34.75	4.81	0.00	98.11	92.11	N/A	N/A
5650	27.44	PK	H	34.73	4.76	0.00	66.93	60.93	68.20	7.27
5700	32.88	PK	H	34.74	4.79	0.00	72.41	66.41	105.20	38.79
5720	37.04	PK	H	34.74	4.80	0.00	76.58	70.58	110.80	40.22
5725	38.62	PK	H	34.75	4.80	0.00	78.17	72.17	122.20	50.03
11510	44.83	PK	H	38.90	6.89	44.61	46.01	40.01	74.00	33.99
11510	33.75	AV	H	38.90	6.89	44.61	34.93	28.93	54.00	25.07
Frequency: 5795 MHz										
5795	72.77	PK	H	34.76	4.83	0.00	112.36	106.36	N/A	N/A
5795	61.88	AV	H	34.76	4.83	0.00	101.47	95.47	N/A	N/A
5795	69.53	PK	V	34.76	4.83	0.00	109.12	103.12	N/A	N/A
5795	58.24	AV	V	34.76	4.83	0.00	97.83	91.83	N/A	N/A
5850	28.01	PK	H	34.77	4.86	0.00	67.64	61.64	122.20	60.56
5855	27.81	PK	H	34.77	4.86	0.00	67.44	61.44	110.80	49.36
5875	27.53	PK	H	34.78	4.87	0.00	67.18	61.18	105.20	44.02
5925	26.85	PK	H	34.79	4.89	0.00	66.53	60.53	68.20	7.67
11590	44.68	PK	H	38.92	6.92	44.41	46.11	40.11	74.00	33.89
11590	32.21	AV	H	38.92	6.92	44.41	33.64	27.64	54.00	26.36

For 802.11ac20 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5745 MHz										
5745	71.85	PK	H	34.75	4.81	0.00	111.41	105.41	N/A	N/A
5745	62.89	AV	H	34.75	4.81	0.00	102.45	96.45	N/A	N/A
5745	71.15	PK	V	34.75	4.81	0.00	110.71	104.71	N/A	N/A
5745	61.97	AV	V	34.75	4.81	0.00	101.53	95.53	N/A	N/A
5650	26.52	PK	H	34.73	4.76	0.00	66.01	60.01	68.20	8.19
5700	27.65	PK	H	34.74	4.79	0.00	67.18	61.18	105.20	44.02
5720	28.97	PK	H	34.74	4.80	0.00	68.51	62.51	110.80	48.29
5725	32.76	PK	H	34.75	4.80	0.00	72.31	66.31	122.20	55.89
11490	45.01	PK	H	38.90	6.89	44.64	46.16	40.16	74.00	33.84
11490	32.17	AV	H	38.90	6.89	44.64	33.32	27.32	54.00	26.68
Frequency: 5785 MHz										
5785	72.54	PK	H	34.76	4.83	0.00	112.13	106.13	N/A	N/A
5785	62.96	AV	H	34.76	4.83	0.00	102.55	96.55	N/A	N/A
5785	71.72	PK	V	34.76	4.83	0.00	111.31	105.31	N/A	N/A
5785	62.09	AV	V	34.76	4.83	0.00	101.68	95.68	N/A	N/A
11570	44.52	PK	H	38.91	6.91	44.46	45.88	39.88	74.00	34.12
11570	32.42	AV	H	38.91	6.91	44.46	33.78	27.78	54.00	26.22
Frequency: 5825 MHz										
5825	73.22	PK	H	34.77	4.85	0.00	112.84	106.84	N/A	N/A
5825	62.57	AV	H	34.77	4.85	0.00	102.19	96.19	N/A	N/A
5825	71.89	PK	V	34.77	4.85	0.00	111.51	105.51	N/A	N/A
5825	61.54	AV	V	34.77	4.85	0.00	101.16	95.16	N/A	N/A
5850	31.38	PK	H	34.77	4.86	0.00	71.01	65.01	122.20	57.19
5855	37.36	PK	H	34.77	4.86	0.00	76.99	70.99	110.80	39.81
5875	27.03	PK	H	34.78	4.87	0.00	66.68	60.68	105.20	44.52
5925	26.92	PK	H	34.79	4.89	0.00	66.60	60.60	68.20	7.60
11650	43.67	PK	H	38.93	6.94	44.27	45.27	39.27	74.00	34.73
11650	32.48	AV	H	38.93	6.94	44.27	34.08	28.08	54.00	25.92

For 802.11ac40 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5755 MHz										
5755	68.95	PK	H	34.75	4.81	0.00	108.51	102.51	N/A	N/A
5755	56.91	AV	H	34.75	4.81	0.00	96.47	90.47	N/A	N/A
5755	67.26	PK	V	34.75	4.81	0.00	106.82	100.82	N/A	N/A
5755	56.53	AV	V	34.75	4.81	0.00	96.09	90.09	N/A	N/A
5650	26.35	PK	H	34.73	4.76	0.00	65.84	59.84	68.20	8.36
5700	30.51	PK	H	34.74	4.79	0.00	70.04	64.04	105.20	41.16
5720	35.33	PK	H	34.74	4.80	0.00	74.87	68.87	110.80	41.93
5725	37.05	PK	H	34.75	4.80	0.00	76.60	70.60	122.20	51.60
11510	43.98	PK	H	38.90	6.89	44.61	45.16	39.16	74.00	34.84
11510	32.07	AV	H	38.90	6.89	44.61	33.25	27.25	54.00	26.75
Frequency: 5795 MHz										
5795	69.48	PK	H	34.76	4.83	0.00	109.07	103.07	N/A	N/A
5795	59.83	AV	H	34.76	4.83	0.00	99.42	93.42	N/A	N/A
5795	68.11	PK	V	34.76	4.83	0.00	107.70	101.70	N/A	N/A
5795	58.04	AV	V	34.76	4.83	0.00	97.63	91.63	N/A	N/A
5850	28.32	PK	H	34.77	4.86	0.00	67.95	61.95	122.20	60.25
5855	27.26	PK	H	34.77	4.86	0.00	66.89	60.89	110.80	49.91
5875	27.48	PK	H	34.78	4.87	0.00	67.13	61.13	105.20	44.07
5925	27.17	PK	H	34.79	4.89	0.00	66.85	60.85	68.20	7.35
11590	44.13	PK	H	38.92	6.92	44.41	45.56	39.56	74.00	34.44
11590	32.27	AV	H	38.92	6.92	44.41	33.70	27.70	54.00	26.30

For 802.11ac80 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5775 MHz										
5775	67.26	PK	H	34.76	4.82	0.00	106.84	100.84	N/A	N/A
5775	55.99	AV	H	34.76	4.82	0.00	95.57	89.57	N/A	N/A
5775	66.52	PK	V	34.76	4.82	0.00	106.10	100.10	N/A	N/A
5775	54.82	AV	V	34.76	4.82	0.00	94.40	88.40	N/A	N/A
5650	27.88	PK	H	34.73	4.76	0.00	67.37	61.37	68.20	6.83
5700	34.52	PK	H	34.74	4.79	0.00	74.05	68.05	105.20	37.15
5720	40.64	PK	H	34.74	4.80	0.00	80.18	74.18	110.80	36.62
5725	40.22	PK	H	34.75	4.80	0.00	79.77	73.77	122.20	48.43
5850	38.31	PK	H	34.77	4.86	0.00	77.94	71.94	122.20	50.26
5855	37.22	PK	H	34.77	4.86	0.00	76.85	70.85	110.80	39.95
5875	30.33	PK	H	34.78	4.87	0.00	69.98	63.98	105.20	41.22
5925	27.81	PK	H	34.79	4.89	0.00	67.49	61.49	68.20	6.71
11550	43.53	PK	H	38.91	6.91	44.51	44.84	38.84	74.00	35.16
11550	32.07	AV	H	38.91	6.91	44.51	33.38	27.38	54.00	26.62

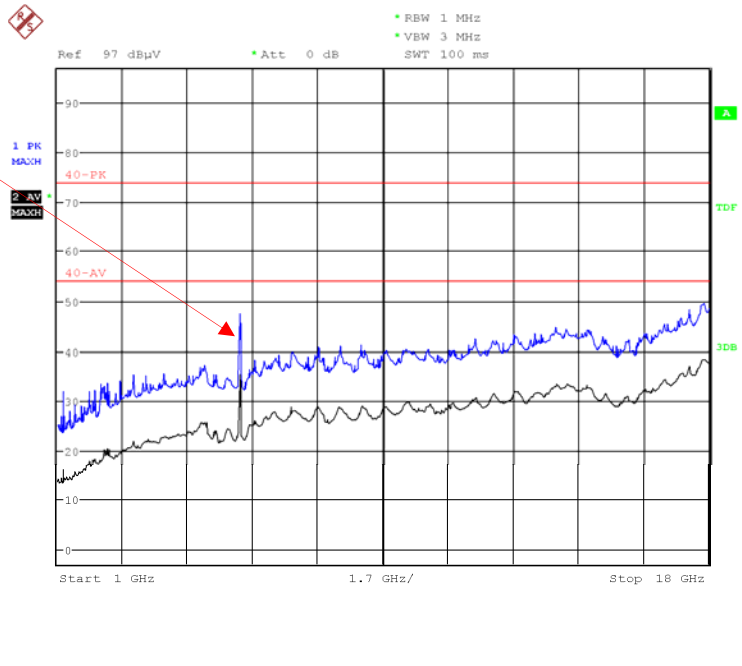
Note:
Corrected Amplitude = Corrected Factor + Reading
Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Margin = Limit- Corr. Amplitude
Spurious emissions more than 20 dB below the limit were not reported.

Please refer to the below pre-scan plot of worst case:

Note: The test distance is 1.5m and distance factor add to the total factor.

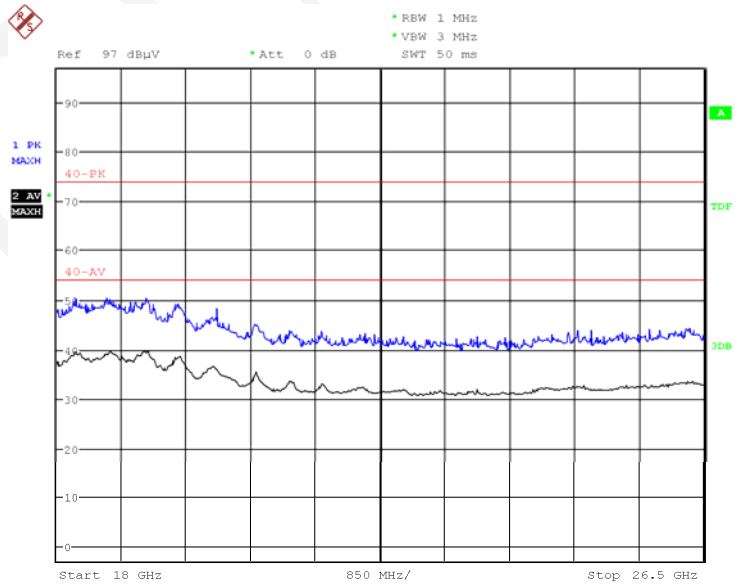
802.11ac80 Mode: High Channel_Horizontal_1GHz-18GHz

Fundamental with Reject Band Filter



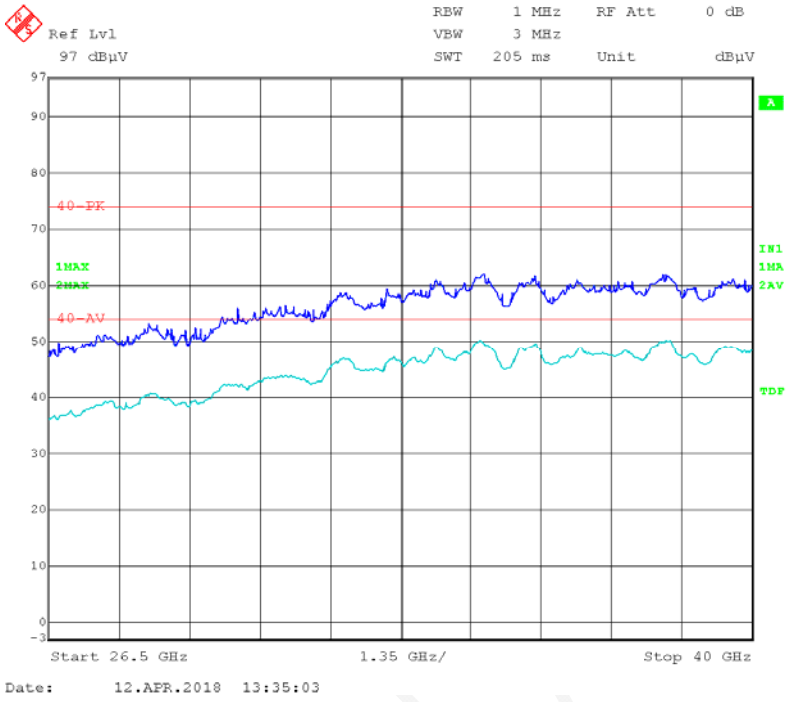
Date: 12.APR.2018 11:39:48

802.11ac80 Mode: High Channel_Horizontal_18GHz-26.5GHz



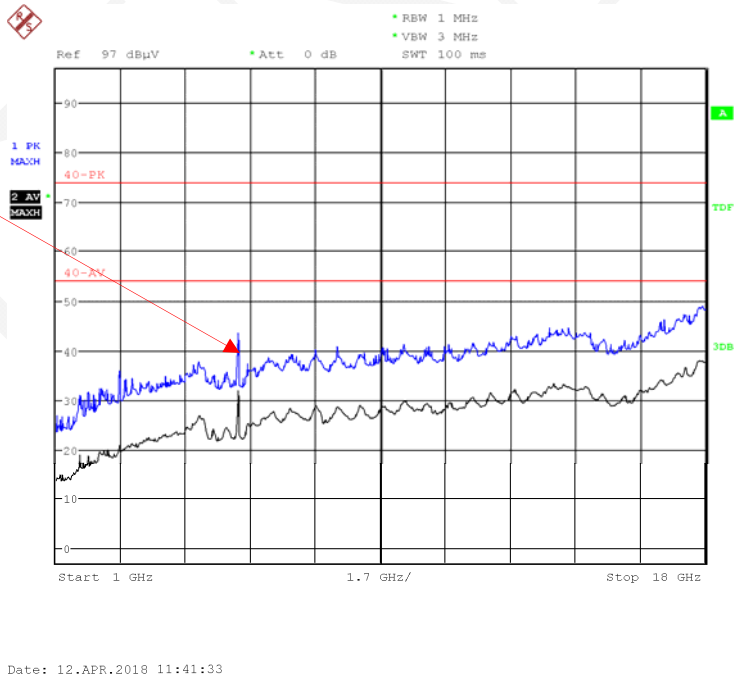
Date: 12.APR.2018 11:09:11

802.11ac80 Mode: High Channel_Horizontal_26.5GHz-40GHz

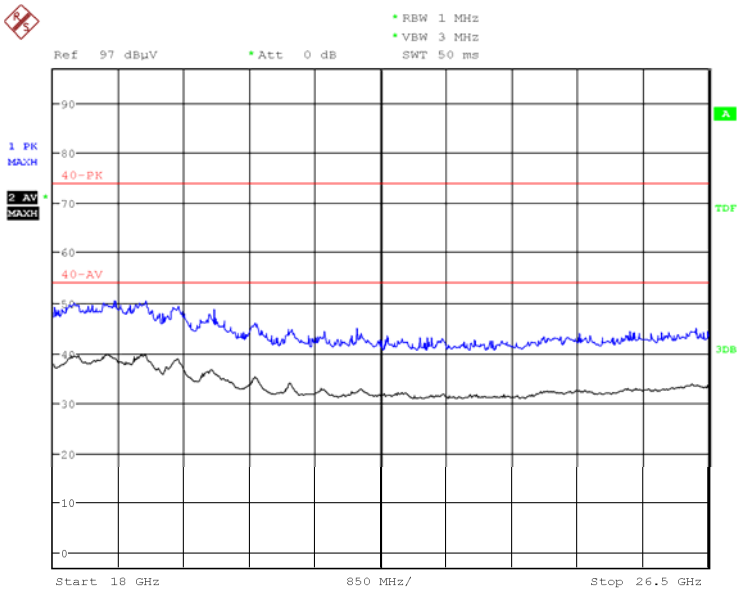


802.11ac80 Mode: High Channel_Vertical_1GHz-18GHz

Fundamental with Reject Band Filter

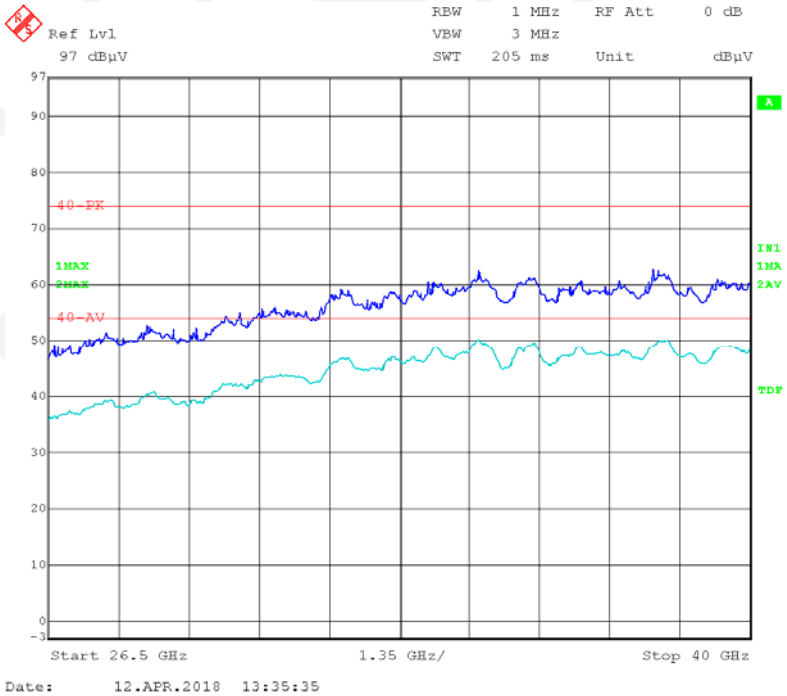


802.11ac80 Mode: High Channel_Vertical_18GHz-26.5GHz



Date: 12.APR.2018 11:08:03

802.11ac80 Mode: High Channel_Vertical_26.5GHz-40GHz



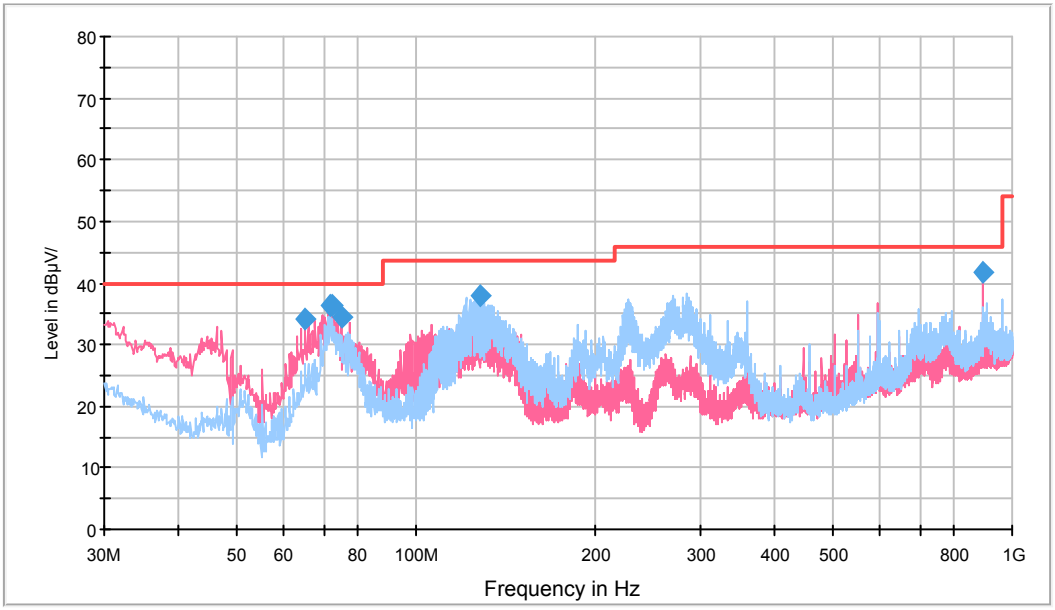
Date: 12.APR.2018 13:35:35

For 8265NGW Module

1) 30 MHz to 1 GHz:

5725-5850MHz band: 802.11ac40-high channel - worst case

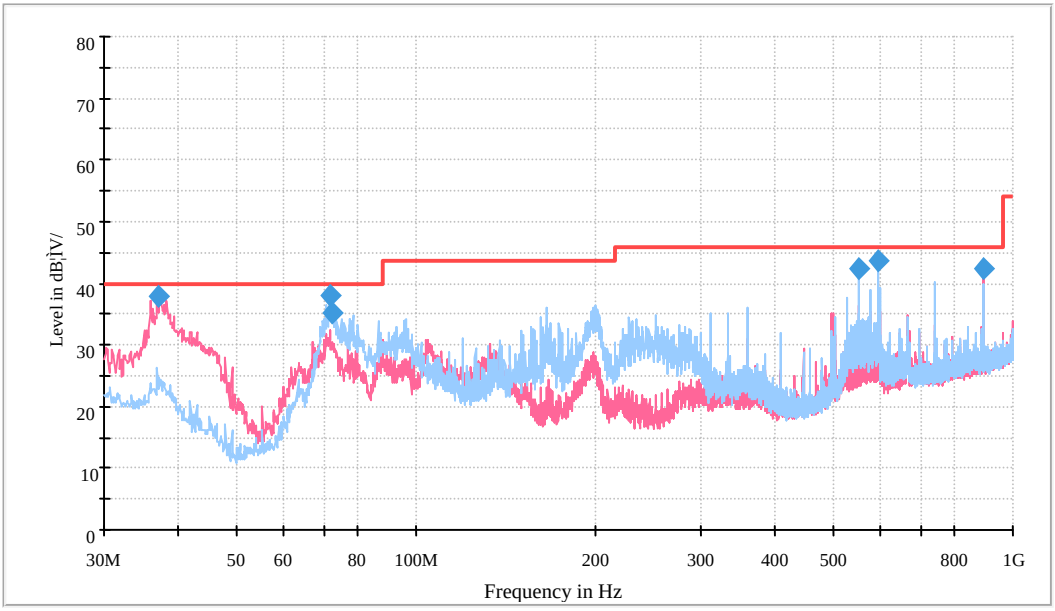
DC Input 1



Frequency (MHz)	QuasicPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)	Corrected Factor (dB/m)	Margin (dB)	Limit (dBµV/m)
65.041250	34.0	100.0	V	84.0	-17.0	6.0	40.0
72.073750	36.3	100.0	V	0.0	-16.6	*3.7	40.0
72.195000	36.5	100.0	V	8.0	-16.6	*3.5	40.0
74.862500	34.4	100.0	V	38.0	-16.6	5.6	40.0
128.333750	37.8	100.0	H	277.0	-10.9	5.7	43.5
890.996250	41.8	100.0	V	194.0	-0.2	*4.2	46.0

**Within measurement uncertainty!*

DC Input 2



Frequency (MHz)	QuasicPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)	Corrected Factor (dB/m)	Margin (dB)	Limit (dBµV/m)
36.790000	38.4	100.0	V	310.0	-9.3	*1.6	40.0
71.952500	38.3	150.0	H	317.0	-16.6	*1.7	40.0
72.195000	37.5	150.0	H	300.0	-16.6	*2.5	40.0
551.981250	42.4	150.0	H	122.0	-5.2	*3.6	46.0
594.055000	43.5	150.0	H	325.0	-4.4	*2.5	46.0
890.996250	42.2	100.0	V	16.0	-0.2	*3.8	46.0

**Within measurement uncertainty!*

2) 1GHz-40GHz

(Note: Above 1GHz was performed at distance 1.5m)

For 5150-5250 MHz:

For 802.11a mode (SISO) (Antenna 1-Worst Case)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5180 MHz										
5180	73.06	PK	H	34.51	4.54	0.00	112.11	106.11	N/A	N/A
5180	62.67	AV	H	34.51	4.54	0.00	101.72	95.72	N/A	N/A
5180	71.86	PK	V	34.51	4.54	0.00	110.91	104.91	N/A	N/A
5180	62.17	AV	V	34.51	4.54	0.00	101.22	95.22	N/A	N/A
5150	30.91	PK	H	34.49	4.53	0.00	69.93	63.93	74.00	10.07
5150	18.93	AV	H	34.49	4.53	0.00	57.95	51.95	54.00	*2.05
10360	45.95	PK	H	38.67	6.52	44.50	46.64	40.64	74.00	33.36
10360	33.04	AV	H	38.67	6.52	44.50	33.73	27.73	54.00	26.27
Frequency: 5200 MHz										
5200	72.18	PK	H	34.52	4.55	0.00	111.25	105.25	N/A	N/A
5200	61.60	AV	H	34.52	4.55	0.00	100.67	94.67	N/A	N/A
5200	70.66	PK	V	34.52	4.55	0.00	109.73	103.73	N/A	N/A
5200	60.88	AV	V	34.52	4.55	0.00	99.95	93.95	N/A	N/A
10400	45.97	PK	H	38.68	6.53	44.53	46.65	40.65	74.00	33.35
10400	32.99	AV	H	38.68	6.53	44.53	33.67	27.67	54.00	26.33
Frequency: 5240 MHz										
5240	71.02	PK	H	34.54	4.57	0.00	110.13	104.13	N/A	N/A
5240	61.26	AV	H	34.54	4.57	0.00	100.37	94.37	N/A	N/A
5240	70.04	PK	V	34.54	4.57	0.00	109.15	103.15	N/A	N/A
5240	59.50	AV	V	34.54	4.57	0.00	98.61	92.61	N/A	N/A
5350	29.29	PK	H	34.61	4.62	0.00	68.52	62.52	74.00	11.48
5350	17.88	AV	H	34.61	4.62	0.00	57.11	51.11	54.00	*2.89
10480	46.08	PK	H	38.70	6.55	44.59	46.74	40.74	74.00	33.26
10480	33.29	AV	H	38.70	6.55	44.59	33.95	27.95	54.00	26.05

**Within measurement uncertainty!*

For 802.11n-HT20 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5180 MHz										
5180	69.77	PK	H	34.51	4.54	0.00	108.82	102.82	N/A	N/A
5180	59.38	AV	H	34.51	4.54	0.00	98.43	92.43	N/A	N/A
5180	68.90	PK	V	34.51	4.54	0.00	107.95	101.95	N/A	N/A
5180	58.29	AV	V	34.51	4.54	0.00	97.34	91.34	N/A	N/A
5150	29.99	PK	H	34.49	4.53	0.00	69.01	63.01	74.00	10.99
5150	18.41	AV	H	34.49	4.53	0.00	57.43	51.43	54.00	*2.57
10360	44.88	PK	H	38.67	6.52	44.50	45.57	39.57	74.00	34.43
10360	32.16	AV	H	38.67	6.52	44.50	32.85	26.85	54.00	27.15
Frequency: 5200 MHz										
5200	68.76	PK	H	34.52	4.55	0.00	107.83	101.83	N/A	N/A
5200	58.08	AV	H	34.52	4.55	0.00	97.15	91.15	N/A	N/A
5200	67.44	PK	V	34.52	4.55	0.00	106.51	100.51	N/A	N/A
5200	57.37	AV	V	34.52	4.55	0.00	96.44	90.44	N/A	N/A
10400	44.89	PK	H	38.68	6.53	44.53	45.57	39.57	74.00	34.43
10400	32.43	AV	H	38.68	6.53	44.53	33.11	27.11	54.00	26.89
Frequency: 5240 MHz										
5240	68.07	PK	H	34.54	4.57	0.00	107.18	101.18	N/A	N/A
5240	57.05	AV	H	34.54	4.57	0.00	96.16	90.16	N/A	N/A
5240	66.04	PK	V	34.54	4.57	0.00	105.15	99.15	N/A	N/A
5240	57.09	AV	V	34.54	4.57	0.00	96.20	90.20	N/A	N/A
5350	29.18	PK	H	34.61	4.62	0.00	68.41	62.41	74.00	11.59
5350	17.95	AV	H	34.61	4.62	0.00	57.18	51.18	54.00	*2.82
10480	45.18	PK	H	38.70	6.55	44.59	45.84	39.84	74.00	34.16
10480	32.14	AV	H	38.70	6.55	44.59	32.80	26.80	54.00	27.20

**Within measurement uncertainty!*

For 802.11n-HT40 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5190 MHz										
5190	68.96	PK	H	34.51	4.55	0.00	108.02	102.02	N/A	N/A
5190	58.53	AV	H	34.51	4.55	0.00	97.59	91.59	N/A	N/A
5190	67.04	PK	V	34.51	4.55	0.00	106.10	100.10	N/A	N/A
5190	57.12	AV	V	34.51	4.55	0.00	96.18	90.18	N/A	N/A
5150	30.19	PK	H	34.49	4.53	0.00	69.21	63.21	74.00	10.79
5150	17.95	AV	H	34.49	4.53	0.00	56.97	50.97	54.00	*3.03
10380	44.38	PK	H	38.68	6.52	44.52	45.06	39.06	74.00	34.94
10380	32.41	AV	H	38.68	6.52	44.52	33.09	27.09	54.00	26.91
Frequency: 5230 MHz										
5230	67.07	PK	H	34.54	4.57	0.00	106.18	100.18	N/A	N/A
5230	57.24	AV	H	34.54	4.57	0.00	96.35	90.35	N/A	N/A
5230	65.86	PK	V	34.54	4.57	0.00	104.97	98.97	N/A	N/A
5230	55.43	AV	V	34.54	4.57	0.00	94.54	88.54	N/A	N/A
5350	29.87	PK	H	34.61	4.62	0.00	69.10	63.10	74.00	10.90
5350	17.66	AV	H	34.61	4.62	0.00	56.89	50.89	54.00	*3.11
10460	43.91	PK	H	38.69	6.55	44.57	44.58	38.58	74.00	35.42
10460	31.94	AV	H	38.69	6.55	44.57	32.61	26.61	54.00	27.39

**Within measurement uncertainty!*

For 802.11ac20 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5180 MHz										
5180	71.34	PK	H	34.51	4.54	0.00	110.39	104.39	N/A	N/A
5180	60.43	AV	H	34.51	4.54	0.00	99.48	93.48	N/A	N/A
5180	70.11	PK	V	34.51	4.54	0.00	109.16	103.16	N/A	N/A
5180	59.80	AV	V	34.51	4.54	0.00	98.85	92.85	N/A	N/A
5150	29.99	PK	H	34.49	4.53	0.00	69.01	63.01	74.00	10.99
5150	18.18	AV	H	34.49	4.53	0.00	57.20	51.20	54.00	*2.80
10360	44.81	PK	H	38.67	6.52	44.50	45.50	39.50	74.00	34.50
10360	31.81	AV	H	38.67	6.52	44.50	32.50	26.50	54.00	27.50
Frequency: 5200 MHz										
5200	70.16	PK	H	34.52	4.55	0.00	109.23	103.23	N/A	N/A
5200	59.32	AV	H	34.52	4.55	0.00	98.39	92.39	N/A	N/A
5200	68.87	PK	V	34.52	4.55	0.00	107.94	101.94	N/A	N/A
5200	58.45	AV	V	34.52	4.55	0.00	97.52	91.52	N/A	N/A
10400	45.04	PK	H	38.68	6.53	44.53	45.72	39.72	74.00	34.28
10400	32.09	AV	H	38.68	6.53	44.53	32.77	26.77	54.00	27.23
Frequency: 5240 MHz										
5240	68.48	PK	H	34.54	4.57	0.00	107.59	101.59	N/A	N/A
5240	57.84	AV	H	34.54	4.57	0.00	96.95	90.95	N/A	N/A
5240	67.46	PK	V	34.54	4.57	0.00	106.57	100.57	N/A	N/A
5240	56.41	AV	V	34.54	4.57	0.00	95.52	89.52	N/A	N/A
5350	30.50	PK	H	34.61	4.62	0.00	69.73	63.73	74.00	10.27
5350	17.78	AV	H	34.61	4.62	0.00	57.01	51.01	54.00	*2.99
10480	44.62	PK	H	38.70	6.55	44.59	45.28	39.28	74.00	34.72
10480	31.75	AV	H	38.70	6.55	44.59	32.41	26.41	54.00	27.59

**Within measurement uncertainty!*

For 802.11ac40 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5190 MHz										
5190	68.30	PK	H	34.51	4.55	0.00	107.36	101.36	N/A	N/A
5190	57.80	AV	H	34.51	4.55	0.00	96.86	90.86	N/A	N/A
5190	66.76	PK	V	34.51	4.55	0.00	105.82	99.82	N/A	N/A
5190	57.05	AV	V	34.51	4.55	0.00	96.11	90.11	N/A	N/A
5150	30.53	PK	H	34.49	4.53	0.00	69.55	63.55	74.00	10.45
5150	18.79	AV	H	34.49	4.53	0.00	57.81	51.81	54.00	*2.19
10380	44.26	PK	H	38.68	6.52	44.52	44.94	38.94	74.00	35.06
10380	32.38	AV	H	38.68	6.52	44.52	33.06	27.06	54.00	26.94
Frequency: 5230 MHz										
5230	66.01	PK	H	34.54	4.57	0.00	105.12	99.12	N/A	N/A
5230	54.29	AV	H	34.54	4.57	0.00	93.40	87.40	N/A	N/A
5230	64.48	PK	V	34.54	4.57	0.00	103.59	97.59	N/A	N/A
5230	53.09	AV	V	34.54	4.57	0.00	92.20	86.20	N/A	N/A
5350	29.16	PK	H	34.61	4.62	0.00	68.39	62.39	74.00	11.61
5350	17.91	AV	H	34.61	4.62	0.00	57.14	51.14	54.00	*2.86
10460	43.99	PK	H	38.69	6.55	44.57	44.66	38.66	74.00	35.34
10460	32.45	AV	H	38.69	6.55	44.57	33.12	27.12	54.00	26.88

**Within measurement uncertainty!*

For 802.11ac80 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5210 MHz										
5210	67.14	PK	H	34.53	4.56	0.00	106.23	100.23	N/A	N/A
5210	55.96	AV	H	34.53	4.56	0.00	95.05	89.05	N/A	N/A
5210	64.35	PK	V	34.53	4.56	0.00	103.44	97.44	N/A	N/A
5210	52.56	AV	V	34.53	4.56	0.00	91.65	85.65	N/A	N/A
5150	32.00	PK	H	34.49	4.53	0.00	71.02	65.02	74.00	8.98
5150	19.81	AV	H	34.49	4.53	0.00	58.83	52.83	54.00	*1.17
5350	29.94	PK	H	34.61	4.62	0.00	69.17	63.17	74.00	10.83
5350	17.86	AV	H	34.61	4.62	0.00	57.09	51.09	54.00	2.91
10420	44.62	PK	H	38.68	6.54	44.55	45.29	39.29	74.00	34.71
10420	32.84	AV	H	38.68	6.54	44.55	33.51	27.51	54.00	26.49

**Within measurement uncertainty!*

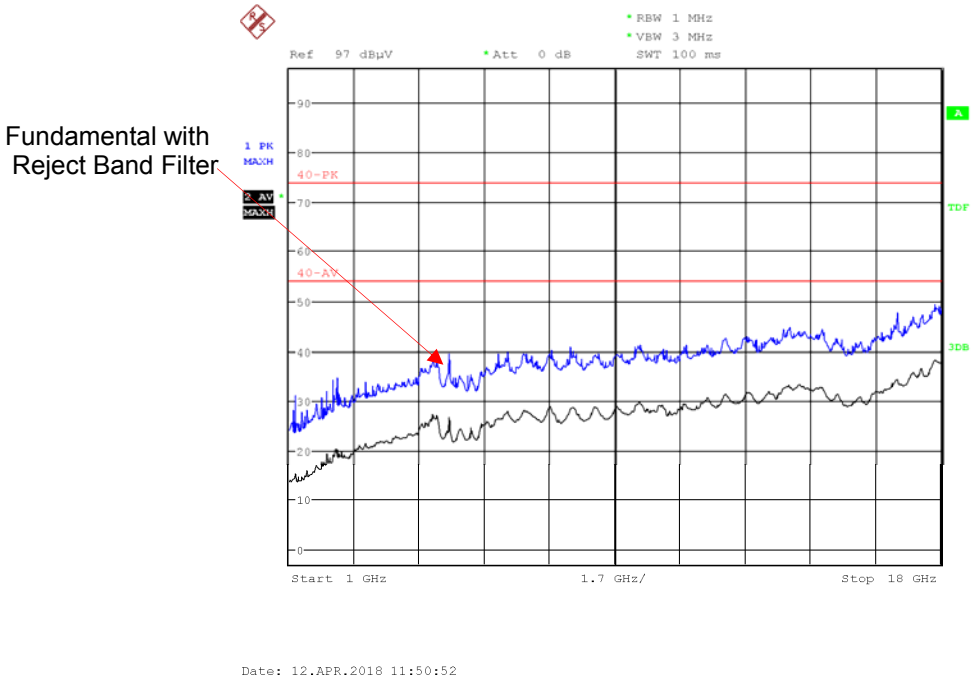
Note:
Corrected Amplitude = Corrected Factor + Reading
Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Margin = Limit- Corr. Amplitude

Spurious emissions more than 20 dB below the limit were not reported.

Please refer to the below pre-scan plot of worst case:

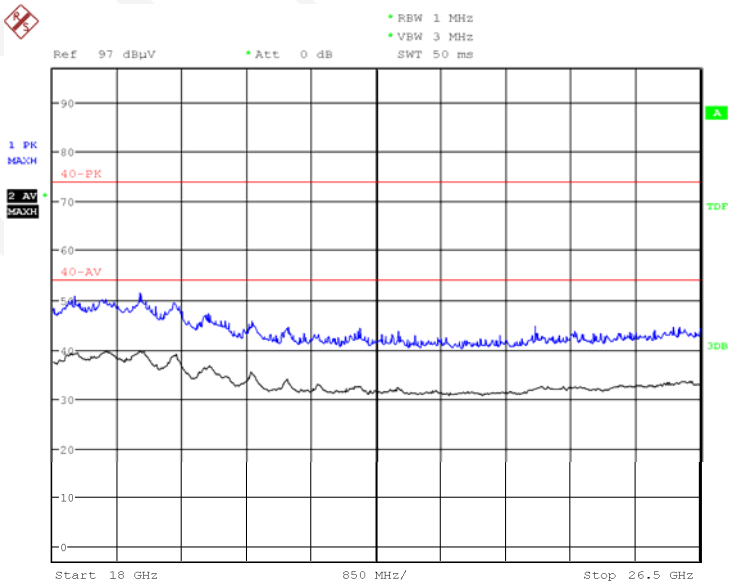
Note: The test distance is 1.5m and distance factor add to the total factor.

802.11ac80 Mode: High Channel_Horizontal_1GHz-18GHz



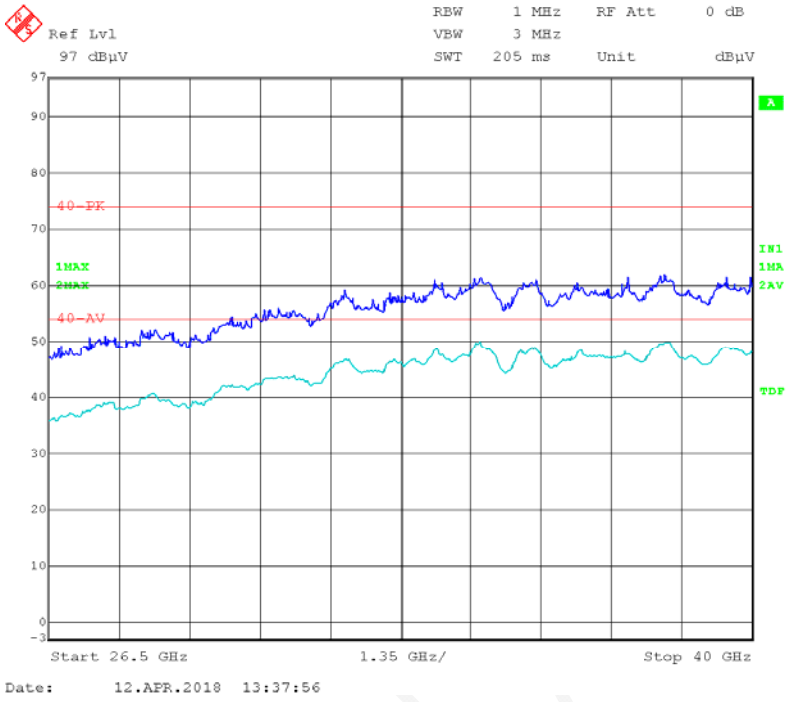
Date: 12.APR.2018 11:50:52

802.11ac80 Mode: High Channel_Horizontal_18GHz-26.5GHz



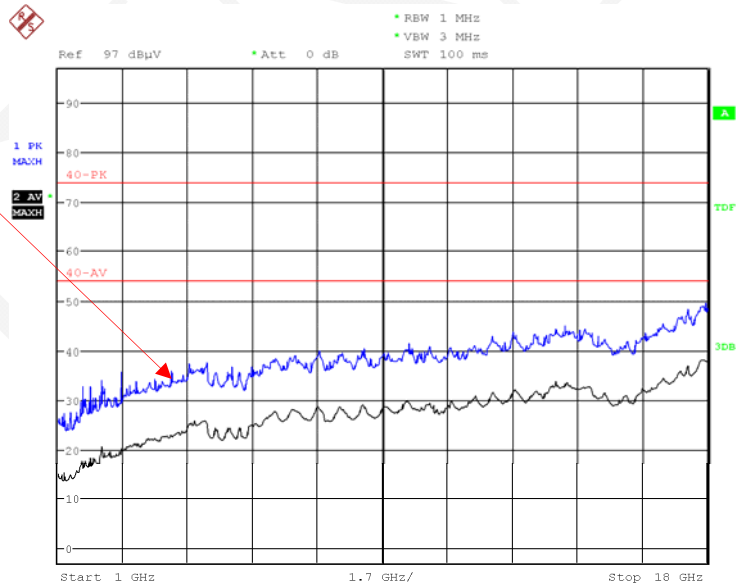
Date: 12.APR.2018 11:05:57

802.11ac80 Mode: High Channel_Horizontal_26.5GHz-40GHz

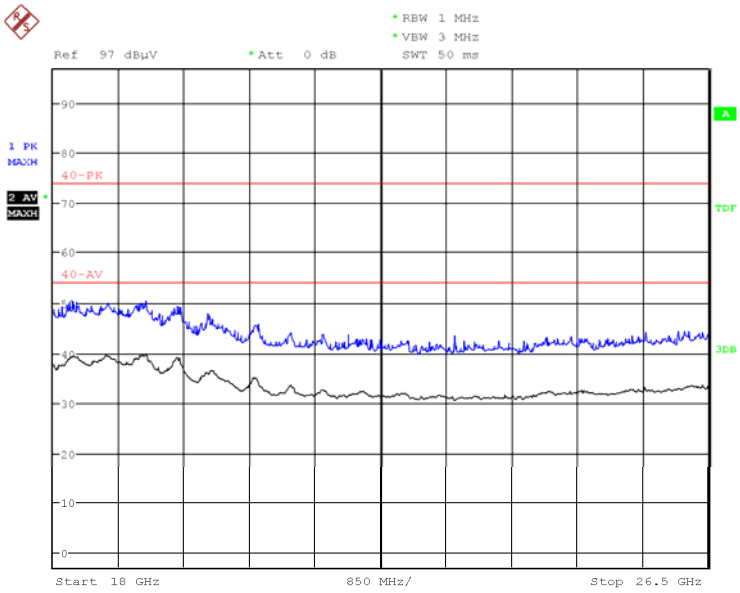


802.11ac80 Mode: High Channel_Vertical_1GHz-18GHz

Fundamental with Reject Band Filter

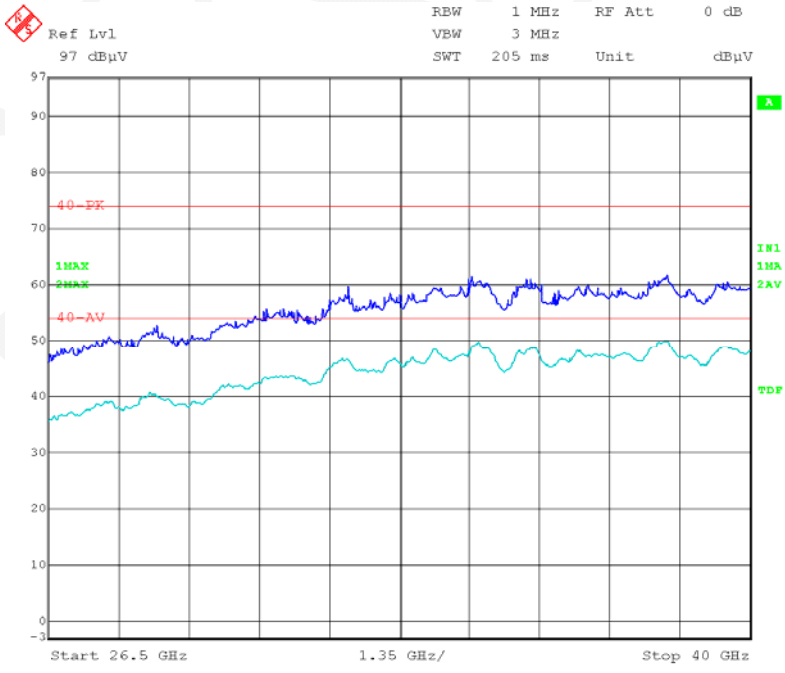


802.11ac80 Mode: High Channel_Vertical_18GHz-26.5GHz



Date: 12.APR.2018 11:06:58

802.11ac80 Mode: High Channel_Vertical_26.5GHz-40GHz



Date: 12.APR.2018 13:38:17

For 5725-5850 MHz

For 802.11a mode (SISO) (Antenna 1-Worst Case)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5745 MHz										
5745	74.58	PK	H	34.75	4.81	0.00	114.14	108.14	N/A	N/A
5745	64.85	AV	H	34.75	4.81	0.00	104.41	98.41	N/A	N/A
5745	72.29	PK	V	34.75	4.81	0.00	111.85	105.85	N/A	N/A
5745	62.20	AV	V	34.75	4.81	0.00	101.76	95.76	N/A	N/A
5650	27.16	PK	H	34.73	4.76	0.00	66.65	60.65	68.20	7.55
5700	29.66	PK	H	34.74	4.79	0.00	69.19	63.19	105.20	42.01
5720	36.38	PK	H	34.74	4.80	0.00	75.92	69.92	110.80	40.88
5725	45.13	PK	H	34.75	4.80	0.00	84.68	78.68	122.20	43.52
11490	45.78	PK	H	38.90	6.89	44.64	46.93	40.93	74.00	33.07
11490	32.41	AV	H	38.90	6.89	44.64	33.56	27.56	54.00	26.44
Frequency: 5785 MHz										
5785	74.14	PK	H	34.76	4.83	0.00	113.73	107.73	N/A	N/A
5785	64.37	AV	H	34.76	4.83	0.00	103.96	97.96	N/A	N/A
5785	71.53	PK	V	34.76	4.83	0.00	111.12	105.12	N/A	N/A
5785	61.33	AV	V	34.76	4.83	0.00	100.92	94.92	N/A	N/A
11570	46.06	PK	H	38.91	6.91	44.46	47.42	41.42	74.00	32.58
11570	32.75	AV	H	38.91	6.91	44.46	34.11	28.11	54.00	25.89
Frequency: 5825 MHz										
5825	74.74	PK	H	34.77	4.85	0.00	114.36	108.36	N/A	N/A
5825	64.79	AV	H	34.77	4.85	0.00	104.41	98.41	N/A	N/A
5825	71.28	PK	V	34.77	4.85	0.00	110.90	104.90	N/A	N/A
5825	61.22	AV	V	34.77	4.85	0.00	100.84	94.84	N/A	N/A
5850	34.67	PK	H	34.77	4.86	0.00	74.30	68.30	122.20	53.90
5855	33.64	PK	H	34.77	4.86	0.00	73.27	67.27	110.80	43.53
5875	28.17	PK	H	34.78	4.87	0.00	67.82	61.82	105.20	43.38
5925	27.35	PK	H	34.79	4.89	0.00	67.03	61.03	68.20	7.17
11650	46.77	PK	H	38.93	6.94	44.27	48.37	42.37	74.00	31.63
11650	33.20	AV	H	38.93	6.94	44.27	34.80	28.80	54.00	25.20

For 802.11n-HT20 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5745 MHz										
5745	73.59	PK	H	34.75	4.81	0.00	113.15	107.15	N/A	N/A
5745	62.45	AV	H	34.75	4.81	0.00	102.01	96.01	N/A	N/A
5745	73.28	PK	V	34.75	4.81	0.00	112.84	106.84	N/A	N/A
5745	64.04	AV	V	34.75	4.81	0.00	103.60	97.60	N/A	N/A
5650	26.31	PK	H	34.73	4.76	0.00	65.80	59.80	68.20	8.40
5700	26.77	PK	H	34.74	4.79	0.00	66.30	60.30	105.20	44.90
5720	30.43	PK	H	34.74	4.80	0.00	69.97	63.97	110.80	46.83
5725	35.15	PK	H	34.75	4.80	0.00	74.70	68.70	122.20	53.50
11490	45.79	PK	H	38.90	6.89	44.64	46.94	40.94	74.00	33.06
11490	32.33	AV	H	38.90	6.89	44.64	33.48	27.48	54.00	26.52
Frequency: 5785 MHz										
5785	73.75	PK	H	34.76	4.83	0.00	113.34	107.34	N/A	N/A
5785	63.45	AV	H	34.76	4.83	0.00	103.04	97.04	N/A	N/A
5785	72.73	PK	V	34.76	4.83	0.00	112.32	106.32	N/A	N/A
5785	63.20	AV	V	34.76	4.83	0.00	102.79	96.79	N/A	N/A
11570	45.56	PK	H	38.91	6.91	44.46	46.92	40.92	74.00	33.08
11570	32.35	AV	H	38.91	6.91	44.46	33.71	27.71	54.00	26.29
Frequency: 5825 MHz										
5825	74.04	PK	H	34.77	4.85	0.00	113.66	107.66	N/A	N/A
5825	64.38	AV	H	34.77	4.85	0.00	104.00	98.00	N/A	N/A
5825	72.83	PK	V	34.77	4.85	0.00	112.45	106.45	N/A	N/A
5825	62.80	AV	V	34.77	4.85	0.00	102.42	96.42	N/A	N/A
5850	31.27	PK	H	34.77	4.86	0.00	70.90	64.90	122.20	57.30
5855	28.95	PK	H	34.77	4.86	0.00	68.58	62.58	110.80	48.22
5875	27.90	PK	H	34.78	4.87	0.00	67.55	61.55	105.20	43.65
5925	26.61	PK	H	34.79	4.89	0.00	66.29	60.29	68.20	7.91
11650	45.84	PK	H	38.93	6.94	44.27	47.44	41.44	74.00	32.56
11650	32.78	AV	H	38.93	6.94	44.27	34.38	28.38	54.00	25.62

For 802.11n-HT40 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5755 MHz										
5755	71.48	PK	H	34.75	4.81	0.00	111.04	105.04	N/A	N/A
5755	60.85	AV	H	34.75	4.81	0.00	100.41	94.41	N/A	N/A
5755	69.34	PK	V	34.75	4.81	0.00	108.90	102.90	N/A	N/A
5755	58.89	AV	V	34.75	4.81	0.00	98.45	92.45	N/A	N/A
5650	27.72	PK	H	34.73	4.76	0.00	67.21	61.21	68.20	6.99
5700	33.14	PK	H	34.74	4.79	0.00	72.67	66.67	105.20	38.53
5720	37.08	PK	H	34.74	4.80	0.00	76.62	70.62	110.80	40.18
5725	38.82	PK	H	34.75	4.80	0.00	78.37	72.37	122.20	49.83
11510	44.86	PK	H	38.90	6.89	44.61	46.04	40.04	74.00	33.96
11510	34.03	AV	H	38.90	6.89	44.61	35.21	29.21	54.00	24.79
Frequency: 5795 MHz										
5795	72.86	PK	H	34.76	4.83	0.00	112.45	106.45	N/A	N/A
5795	62.12	AV	H	34.76	4.83	0.00	101.71	95.71	N/A	N/A
5795	69.79	PK	V	34.76	4.83	0.00	109.38	103.38	N/A	N/A
5795	58.54	AV	V	34.76	4.83	0.00	98.13	92.13	N/A	N/A
5850	28.13	PK	H	34.77	4.86	0.00	67.76	61.76	122.20	60.44
5855	28.08	PK	H	34.77	4.86	0.00	67.71	61.71	110.80	49.09
5875	27.57	PK	H	34.78	4.87	0.00	67.22	61.22	105.20	43.98
5925	27.15	PK	H	34.79	4.89	0.00	66.83	60.83	68.20	7.37
11590	45.00	PK	H	38.92	6.92	44.41	46.43	40.43	74.00	33.57
11590	32.55	AV	H	38.92	6.92	44.41	33.98	27.98	54.00	26.02

For 802.11ac20 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5745 MHz										
5745	71.91	PK	H	34.75	4.81	0.00	111.47	105.47	N/A	N/A
5745	63.04	AV	H	34.75	4.81	0.00	102.60	96.60	N/A	N/A
5745	71.22	PK	V	34.75	4.81	0.00	110.78	104.78	N/A	N/A
5745	62.13	AV	V	34.75	4.81	0.00	101.69	95.69	N/A	N/A
5650	26.55	PK	H	34.73	4.76	0.00	66.04	60.04	68.20	8.16
5700	27.70	PK	H	34.74	4.79	0.00	67.23	61.23	105.20	43.97
5720	29.15	PK	H	34.74	4.80	0.00	68.69	62.69	110.80	48.11
5725	32.86	PK	H	34.75	4.80	0.00	72.41	66.41	122.20	55.79
11490	45.11	PK	H	38.90	6.89	44.64	46.26	40.26	74.00	33.74
11490	32.23	AV	H	38.90	6.89	44.64	33.38	27.38	54.00	26.62
Frequency: 5785 MHz										
5785	72.61	PK	H	34.76	4.83	0.00	112.20	106.20	N/A	N/A
5785	63.07	AV	H	34.76	4.83	0.00	102.66	96.66	N/A	N/A
5785	71.80	PK	V	34.76	4.83	0.00	111.39	105.39	N/A	N/A
5785	62.11	AV	V	34.76	4.83	0.00	101.70	95.70	N/A	N/A
11570	44.69	PK	H	38.91	6.91	44.46	46.05	40.05	74.00	33.95
11570	32.58	AV	H	38.91	6.91	44.46	33.94	27.94	54.00	26.06
Frequency: 5825 MHz										
5825	73.36	PK	H	34.77	4.85	0.00	112.98	106.98	N/A	N/A
5825	62.65	AV	H	34.77	4.85	0.00	102.27	96.27	N/A	N/A
5825	71.95	PK	V	34.77	4.85	0.00	111.57	105.57	N/A	N/A
5825	61.61	AV	V	34.77	4.85	0.00	101.23	95.23	N/A	N/A
5850	31.56	PK	H	34.77	4.86	0.00	71.19	65.19	122.20	57.01
5855	37.50	PK	H	34.77	4.86	0.00	77.13	71.13	110.80	39.67
5875	27.11	PK	H	34.78	4.87	0.00	66.76	60.76	105.20	44.44
5925	27.04	PK	H	34.79	4.89	0.00	66.72	60.72	68.20	7.48
11650	43.76	PK	H	38.93	6.94	44.27	45.36	39.36	74.00	34.64
11650	32.58	AV	H	38.93	6.94	44.27	34.18	28.18	54.00	25.82

For 802.11ac40 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5755 MHz										
5755	69.18	PK	H	34.75	4.81	0.00	108.74	102.74	N/A	N/A
5755	57.03	AV	H	34.75	4.81	0.00	96.59	90.59	N/A	N/A
5755	67.35	PK	V	34.75	4.81	0.00	106.91	100.91	N/A	N/A
5755	56.60	AV	V	34.75	4.81	0.00	96.16	90.16	N/A	N/A
5650	26.52	PK	H	34.73	4.76	0.00	66.01	60.01	68.20	8.19
5700	30.60	PK	H	34.74	4.79	0.00	70.13	64.13	105.20	41.07
5720	35.35	PK	H	34.74	4.80	0.00	74.89	68.89	110.80	41.91
5725	37.24	PK	H	34.75	4.80	0.00	76.79	70.79	122.20	51.41
11510	44.23	PK	H	38.90	6.89	44.61	45.41	39.41	74.00	34.59
11510	32.36	AV	H	38.90	6.89	44.61	33.54	27.54	54.00	26.46
Frequency: 5795 MHz										
5795	69.72	PK	H	34.76	4.83	0.00	109.31	103.31	N/A	N/A
5795	59.97	AV	H	34.76	4.83	0.00	99.56	93.56	N/A	N/A
5795	68.42	PK	V	34.76	4.83	0.00	108.01	102.01	N/A	N/A
5795	58.17	AV	V	34.76	4.83	0.00	97.76	91.76	N/A	N/A
5850	28.47	PK	H	34.77	4.86	0.00	68.10	62.10	122.20	60.10
5855	27.47	PK	H	34.77	4.86	0.00	67.10	61.10	110.80	49.70
5875	27.58	PK	H	34.78	4.87	0.00	67.23	61.23	105.20	43.97
5925	27.46	PK	H	34.79	4.89	0.00	67.14	61.14	68.20	7.06
11590	44.14	PK	H	38.92	6.92	44.41	45.57	39.57	74.00	34.43
11590	32.30	AV	H	38.92	6.92	44.41	33.73	27.73	54.00	26.27

For 802.11ac80 mode (MIMO)

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Measurement (PK /AV)	Polar (H/V)	Factor (dB/m)						
Frequency: 5775 MHz										
5775	67.68	PK	H	34.76	4.82	0.00	107.26	101.26	N/A	N/A
5775	56.21	AV	H	34.76	4.82	0.00	95.79	89.79	N/A	N/A
5775	66.97	PK	V	34.76	4.82	0.00	106.55	100.55	N/A	N/A
5775	55.29	AV	V	34.76	4.82	0.00	94.87	88.87	N/A	N/A
5650	28.38	PK	H	34.73	4.76	0.00	67.87	61.87	68.20	6.33
5700	34.93	PK	H	34.74	4.79	0.00	74.46	68.46	105.20	36.74
5720	40.81	PK	H	34.74	4.80	0.00	80.35	74.35	110.80	36.45
5725	40.53	PK	H	34.75	4.80	0.00	80.08	74.08	122.20	48.12
5850	38.54	PK	H	34.77	4.86	0.00	78.17	72.17	122.20	50.03
5855	37.44	PK	H	34.77	4.86	0.00	77.07	71.07	110.80	39.73
5875	30.58	PK	H	34.78	4.87	0.00	70.23	64.23	105.20	40.97
5925	28.29	PK	H	34.79	4.89	0.00	67.97	61.97	68.20	6.23
11550	43.74	PK	H	38.91	6.91	44.51	45.05	39.05	74.00	34.95
11550	32.22	AV	H	38.91	6.91	44.51	33.53	27.53	54.00	26.47

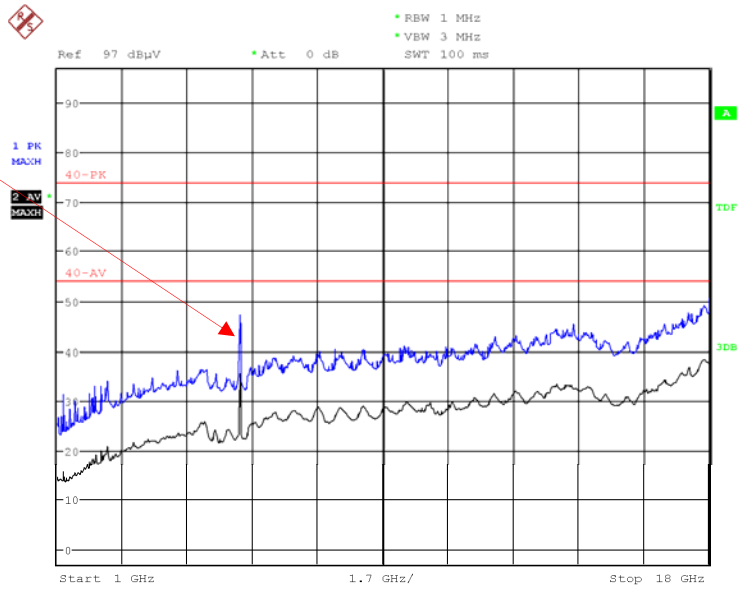
Note:
Corrected Amplitude = Corrected Factor + Reading
Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Margin = Limit- Corr. Amplitude
Spurious emissions more than 20 dB below the limit were not reported.

Please refer to the below pre-scan plot of worst case:

Note: The test distance is 1.5m and distance factor add to the total factor.

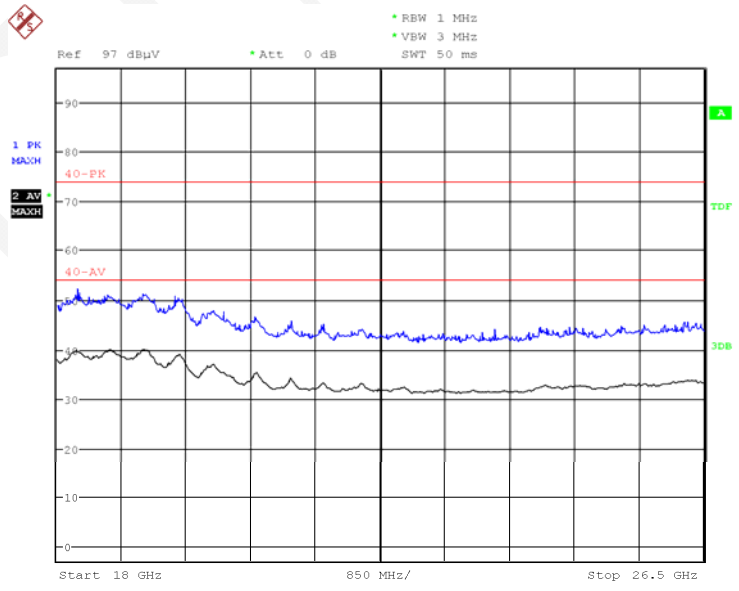
802.11ac80 Mode: High Channel_Horizontal_1GHz-18GHz

Fundamental with Reject Band Filter



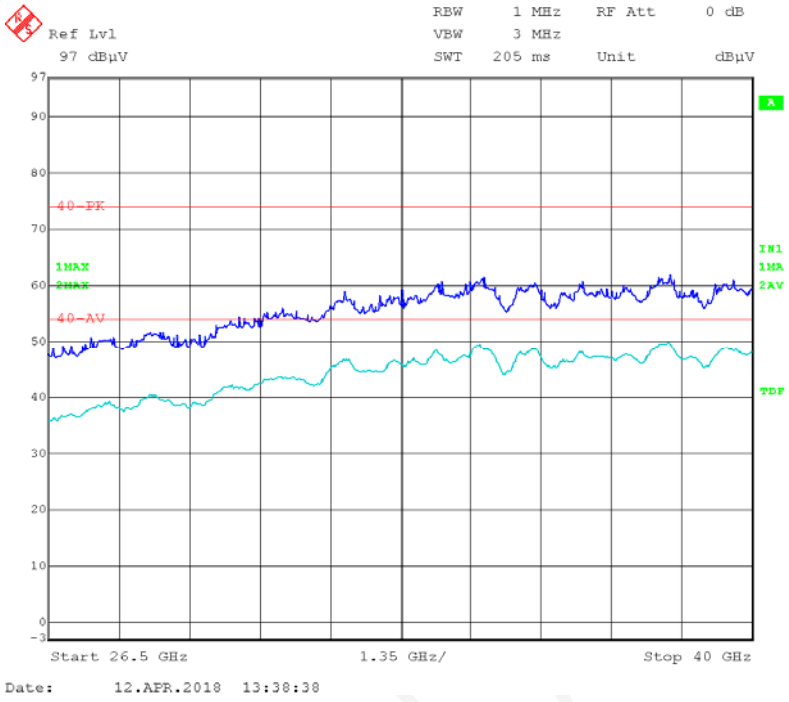
Date: 12.APR.2018 11:39:12

802.11ac80 Mode: High Channel_Horizontal_18GHz-26.5GHz



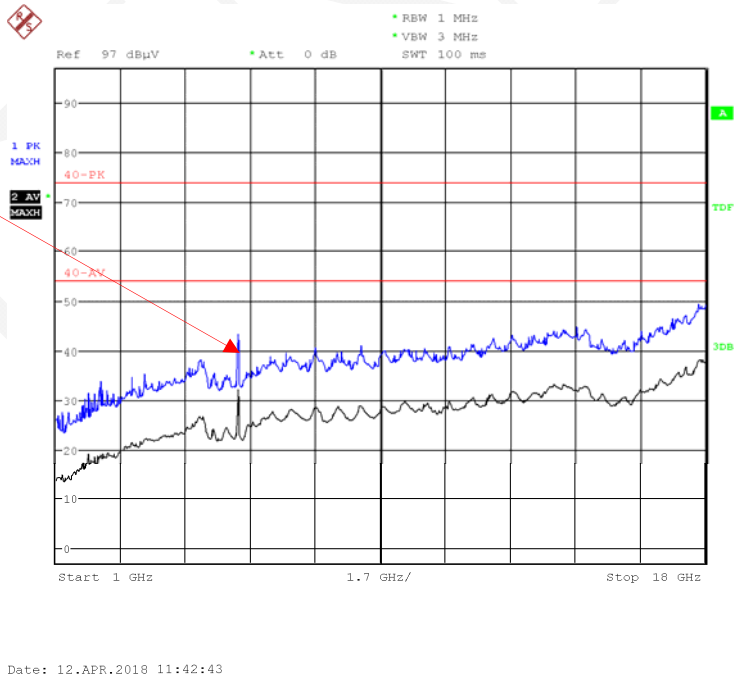
Date: 12.APR.2018 11:11:30

802.11ac80 Mode: High Channel_Horizontal_26.5GHz-40GHz

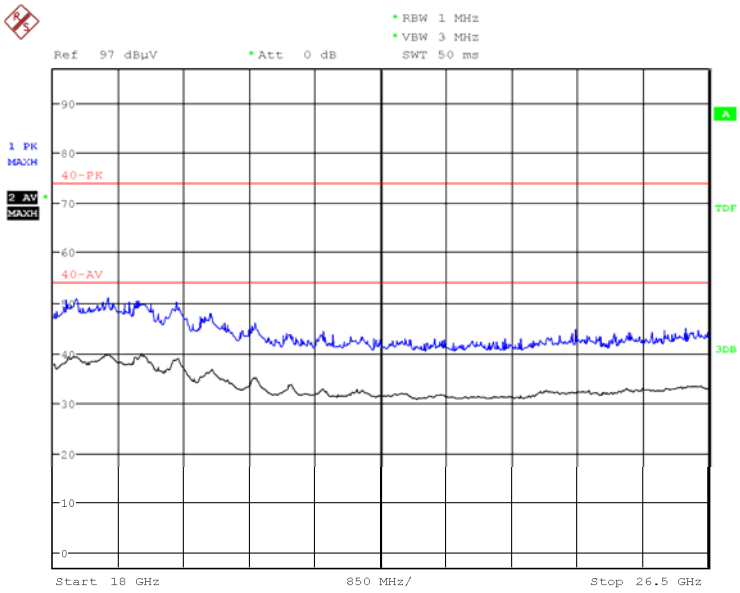


802.11ac80 Mode: High Channel_Vertical_1GHz-18GHz

Fundamental with Reject Band Filter

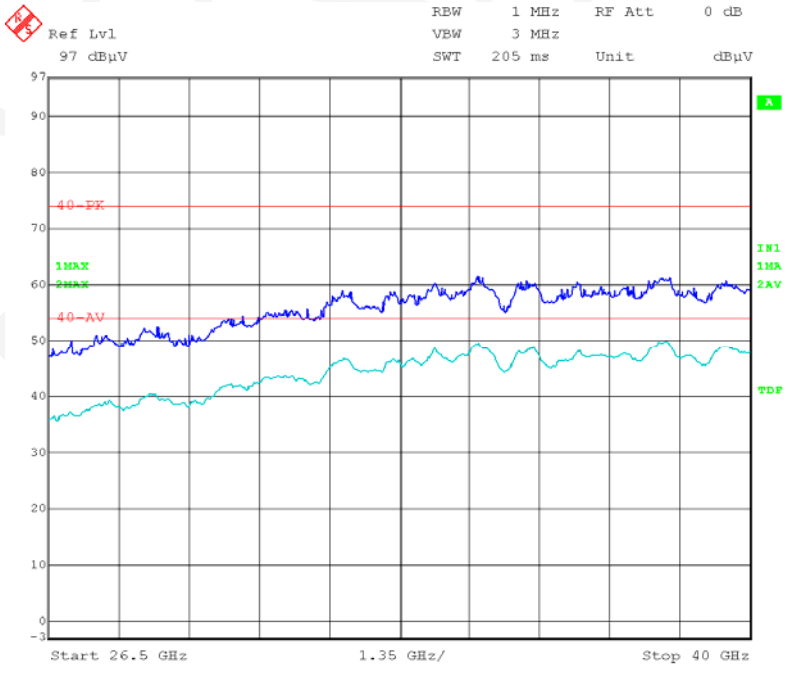


802.11ac80 Mode: High Channel_Vertical_18GHz-26.5GHz



Date: 12.APR.2018 11:12:37

802.11ac80 Mode: High Channel_Vertical_26.5GHz-40GHz



Date: 12.APR.2018 13:39:00

FCC §15.407(b) (1), (4) (i) – BAND EDGE

Applicable Standard

FCC §15.407(b) (1), (4) (i)

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:
(i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibration or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 1 MHz and VBW to 3 MHz of spectrum analyzer. Offset the antenna gain and cable loss.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

Test Data

Environmental Conditions

Temperature:	21 ~ 28 °C
Relative Humidity:	38 ~ 59 %
ATM Pressure:	95.0 ~ 96.0 kPa

** The testing was performed by Tom Tang from 2018-03-29 to 2018-04-03.*

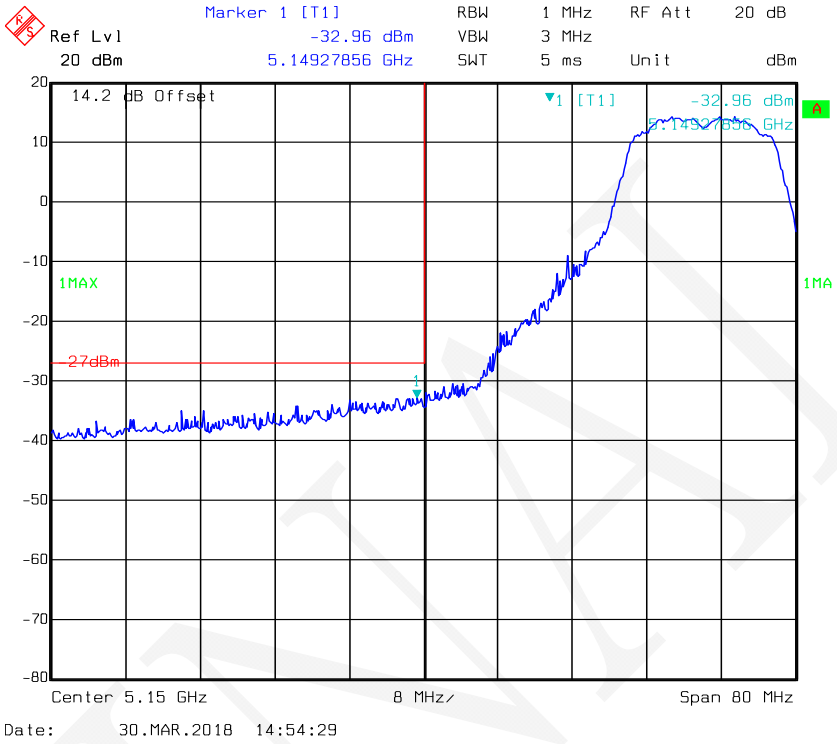
Test mode: Transmitting

Test Result: Compliance. Please refer to following table and plots.

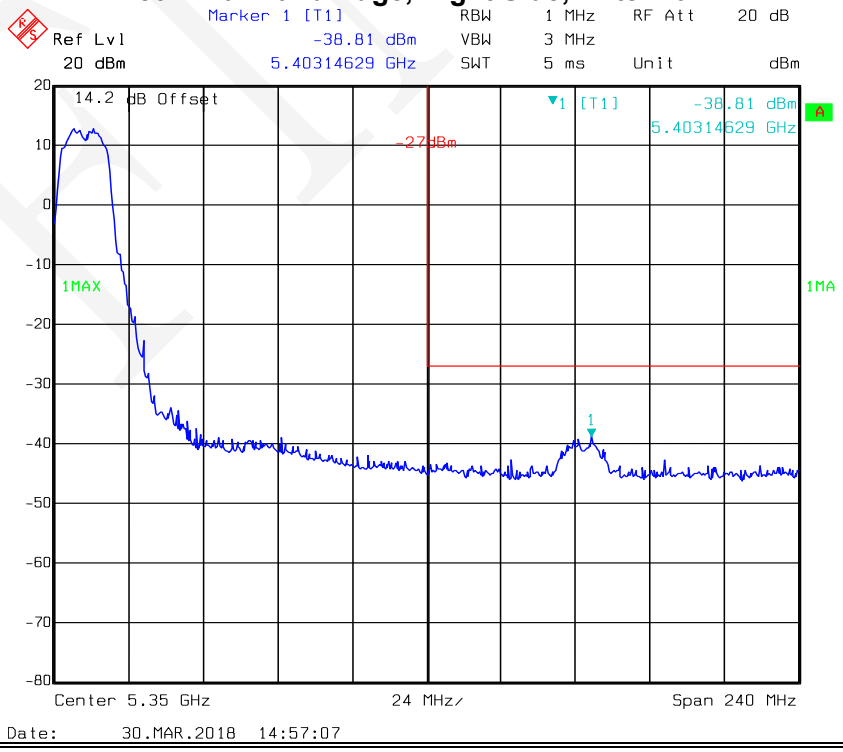
For 7265NGW Module

For 5150-5250 MHz (Note: The antenna gain was set in the offset, all emissions under limit more than 3dBc, so MIMO mode also comply the requirement.)

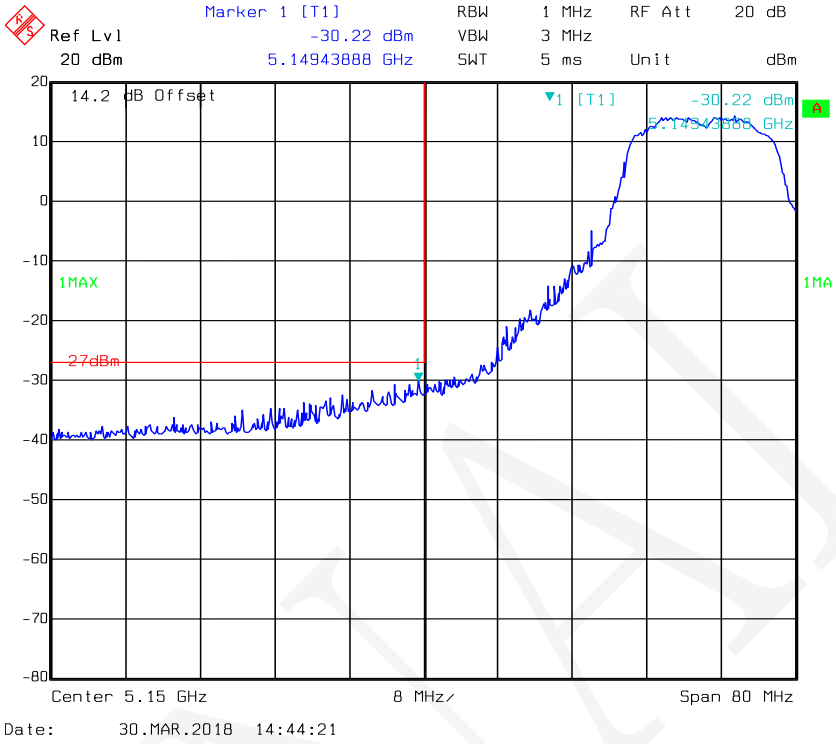
802.11a: Band Edge, Left Side, Antenna 1



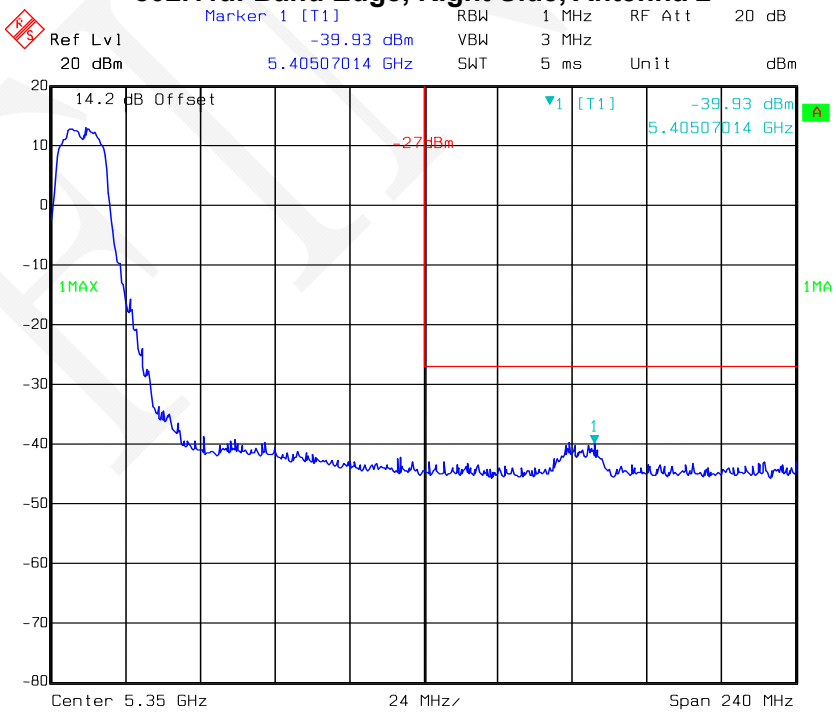
802.11a: Band Edge, Right Side, Antenna 1



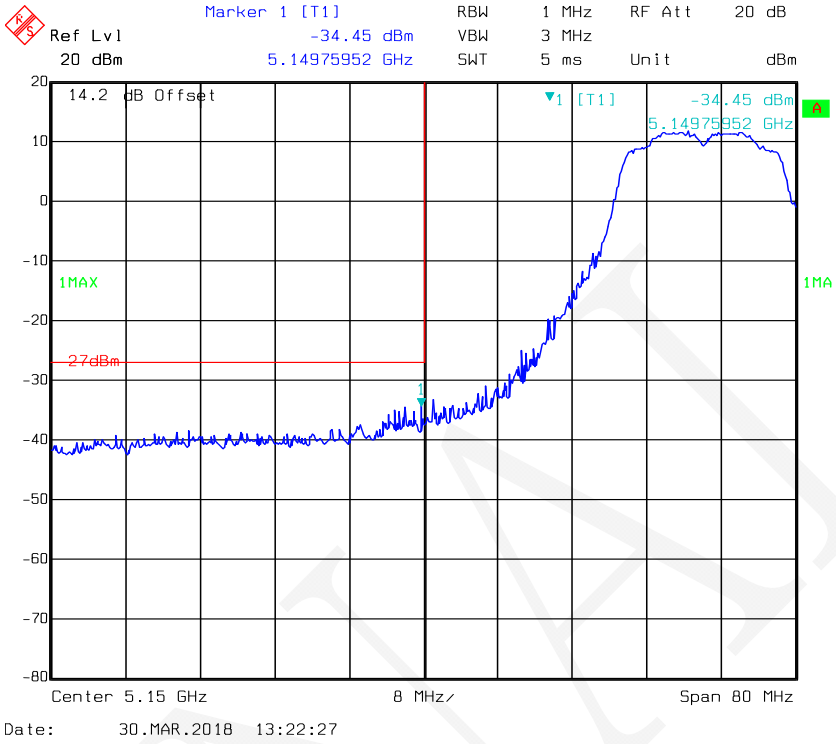
802.11a: Band Edge, Left Side, Antenna 2



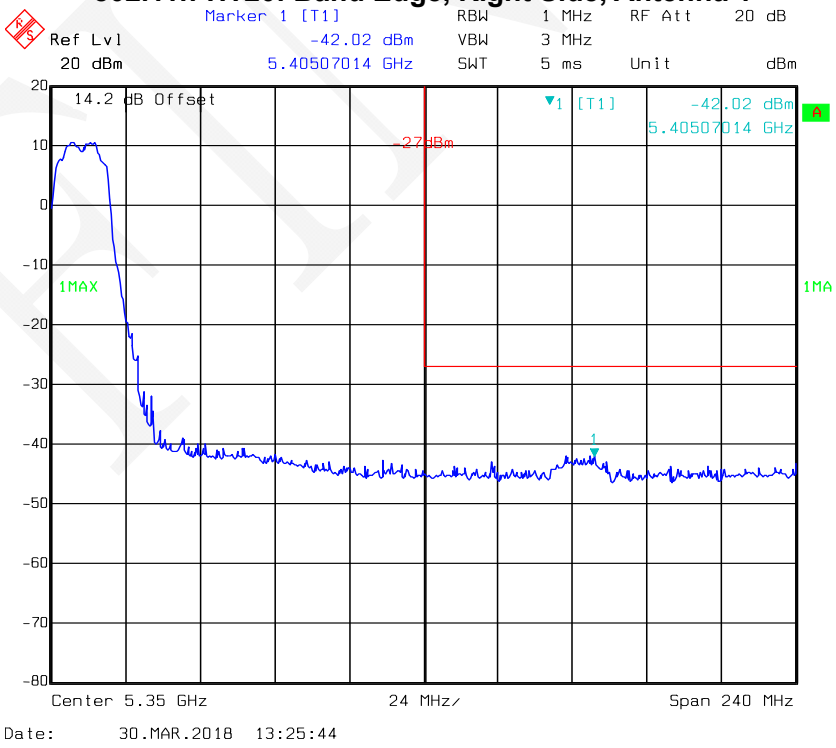
802.11a: Band Edge, Right Side, Antenna 2



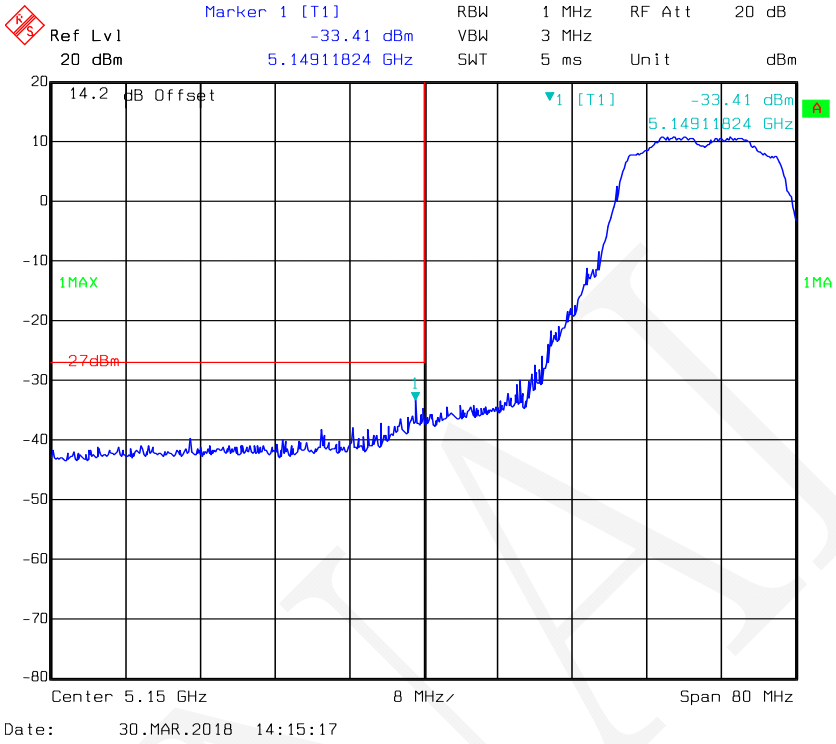
802.11n-HT20: Band Edge, Left Side, Antenna 1



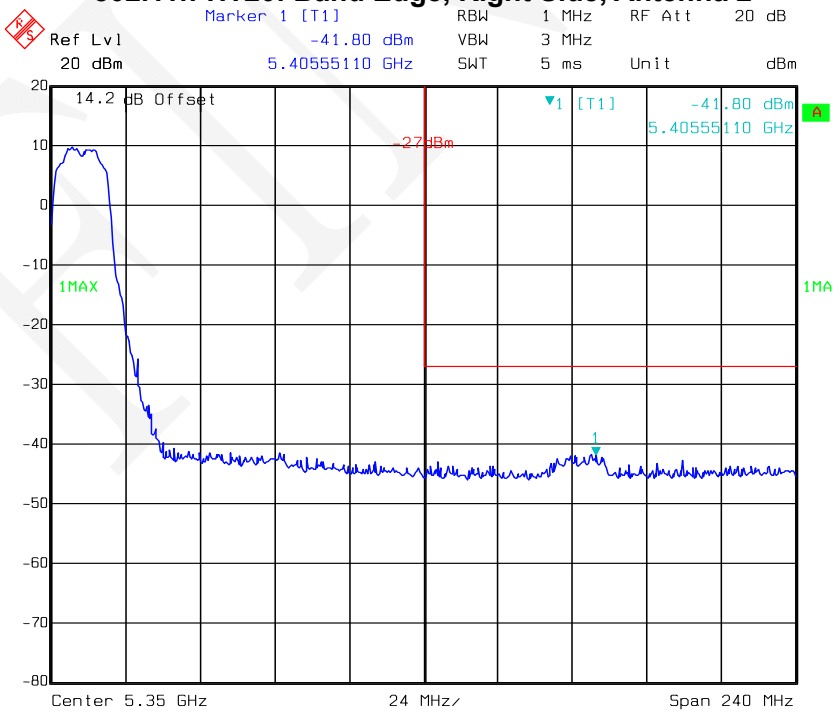
802.11n-HT20: Band Edge, Right Side, Antenna 1



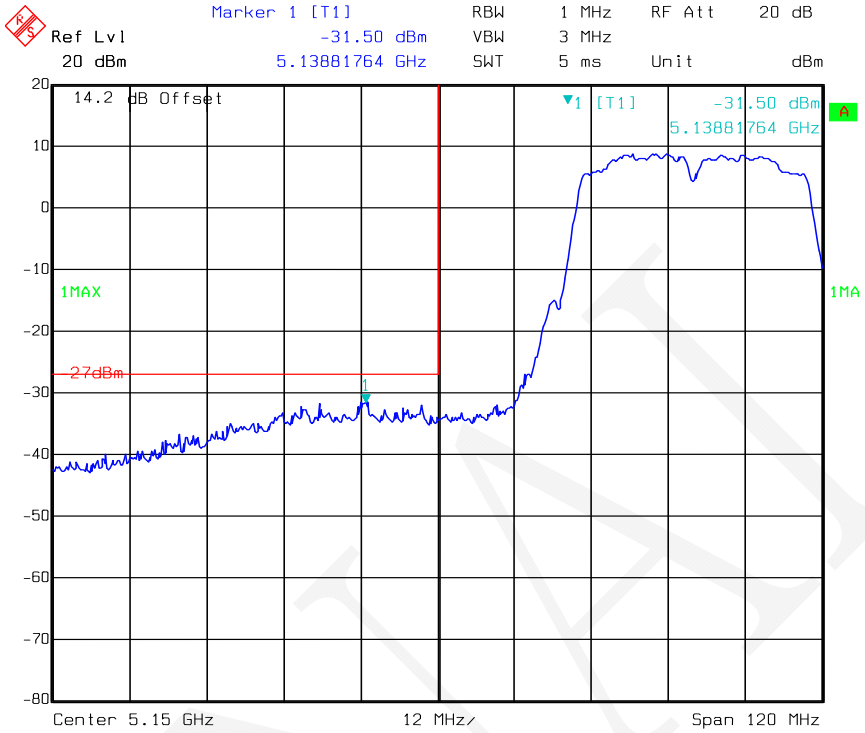
802.11n-HT20: Band Edge, Left Side, Antenna 2



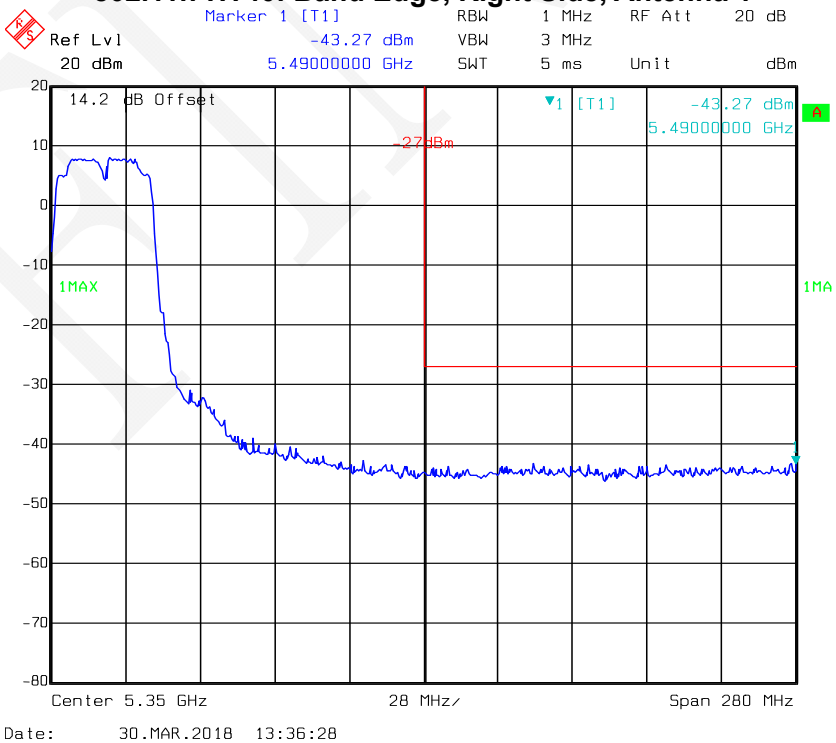
802.11n-HT20: Band Edge, Right Side, Antenna 2



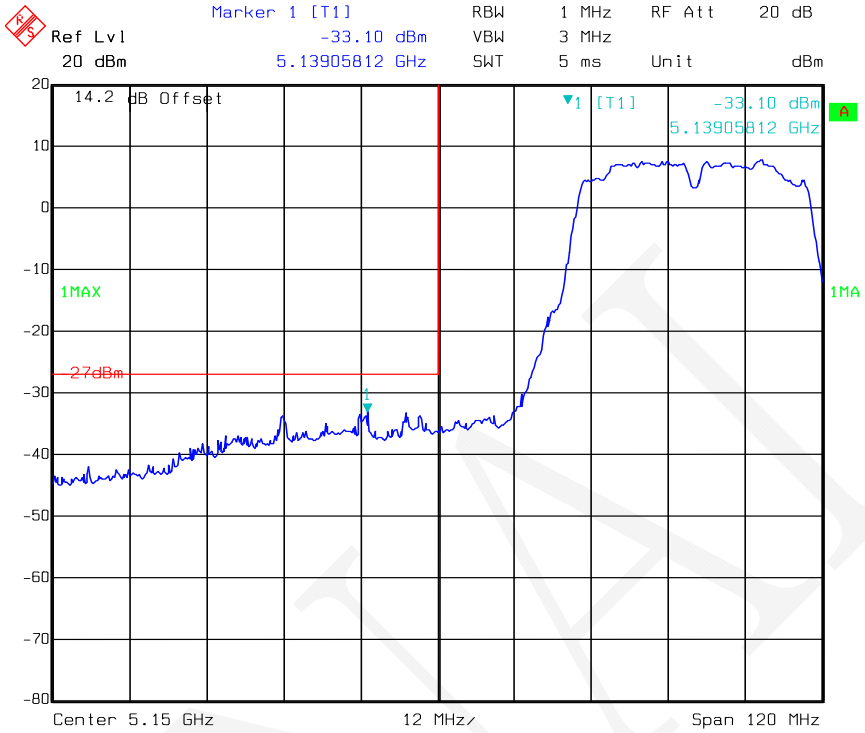
802.11n-HT40: Band Edge, Left Side, Antenna 1



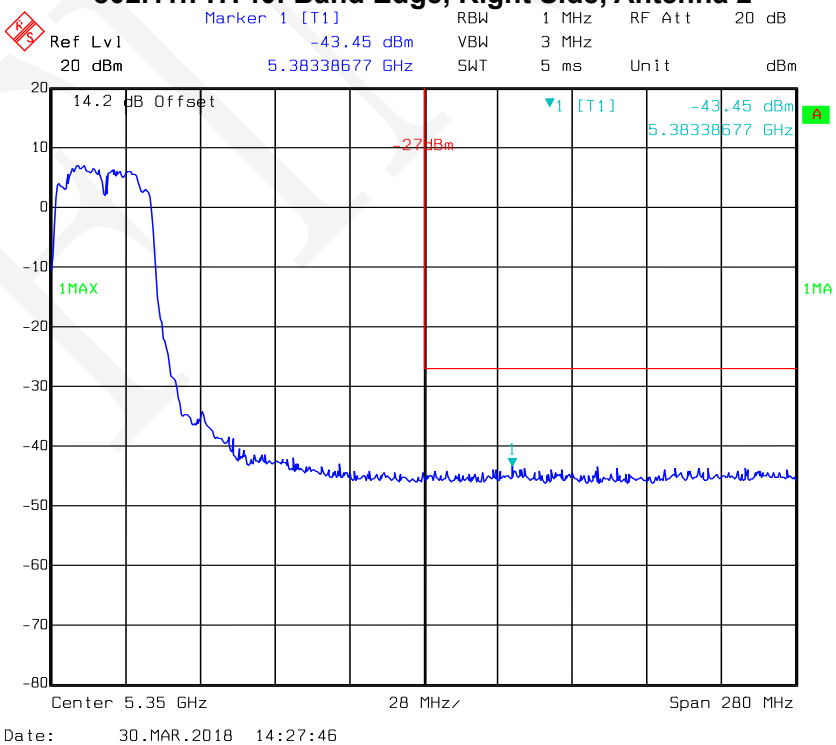
802.11n-HT40: Band Edge, Right Side, Antenna 1



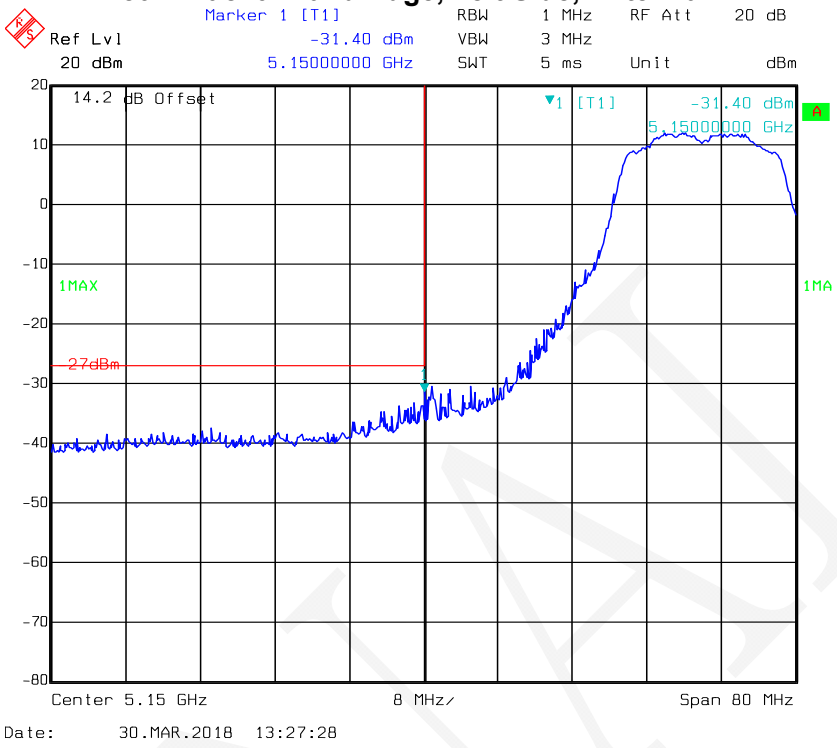
802.11n-HT40: Band Edge, Left Side, Antenna 2



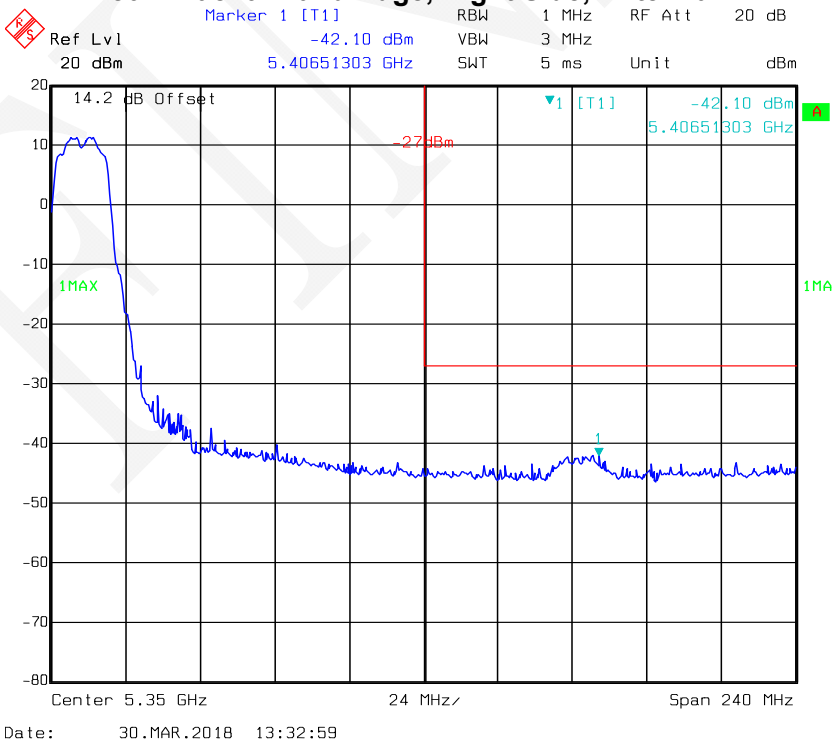
802.11n-HT40: Band Edge, Right Side, Antenna 2



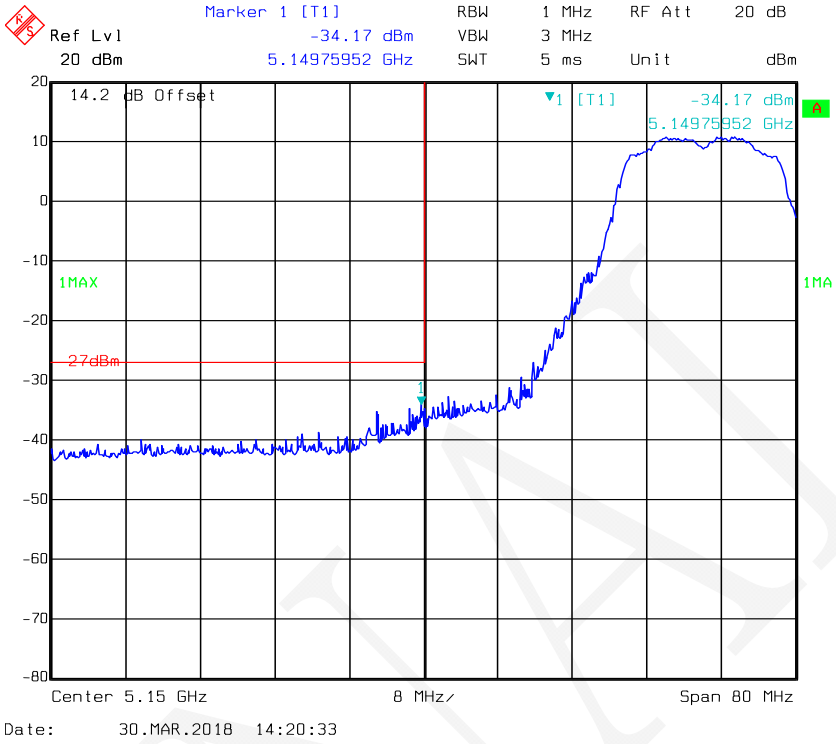
802.11ac20: Band Edge, Left Side, Antenna 1



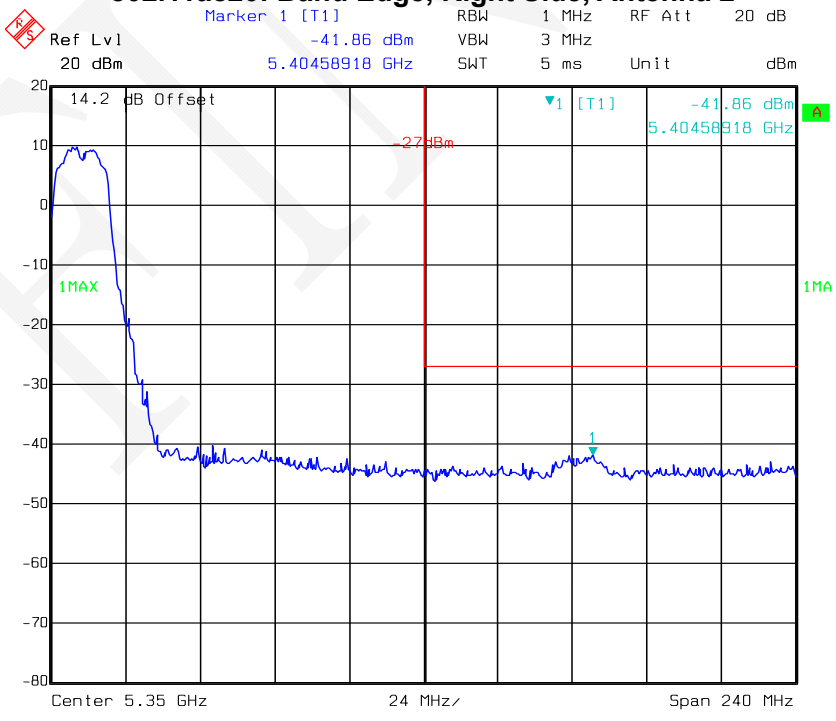
802.11ac20: Band Edge, Right Side, Antenna 1



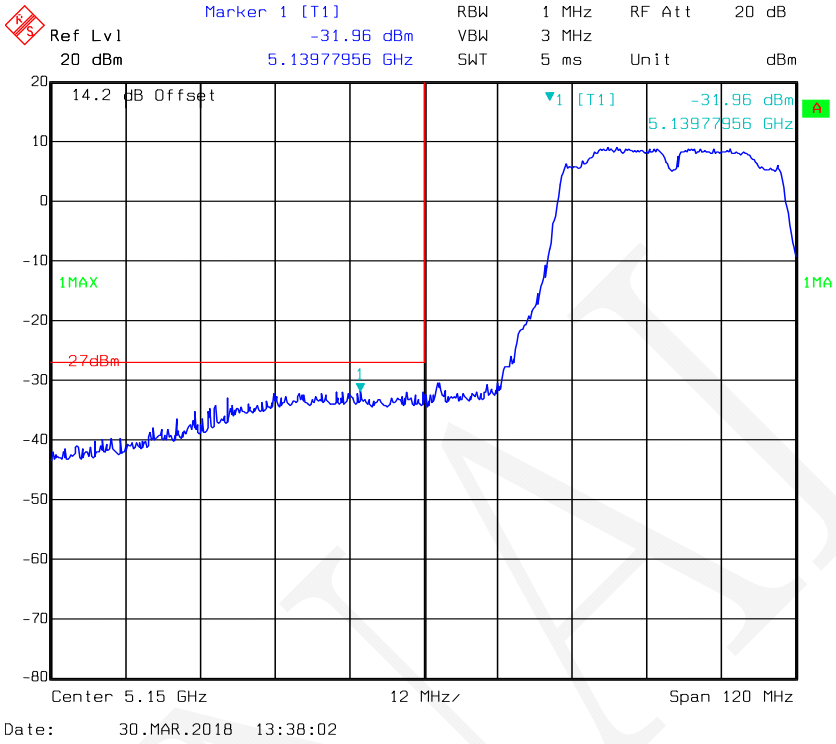
802.11ac20: Band Edge, Left Side, Antenna 2



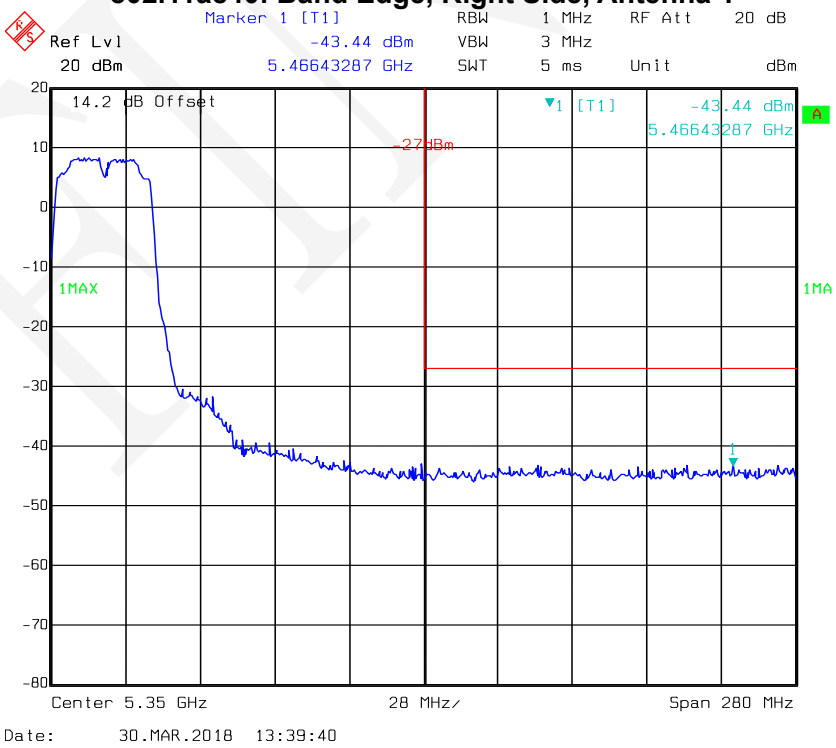
802.11ac20: Band Edge, Right Side, Antenna 2



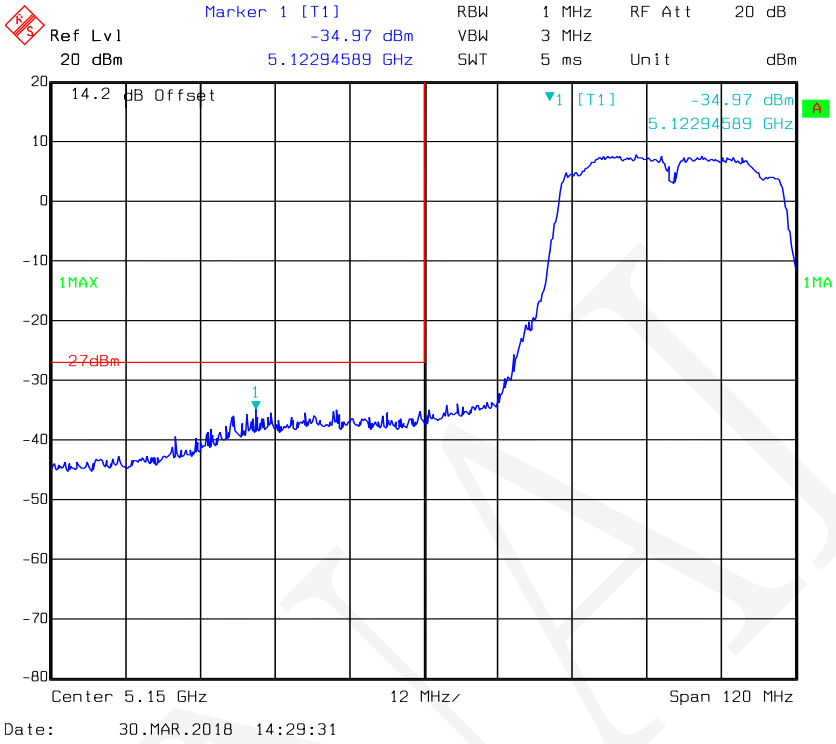
802.11ac40: Band Edge, Left Side, Antenna 1



802.11ac40: Band Edge, Right Side, Antenna 1

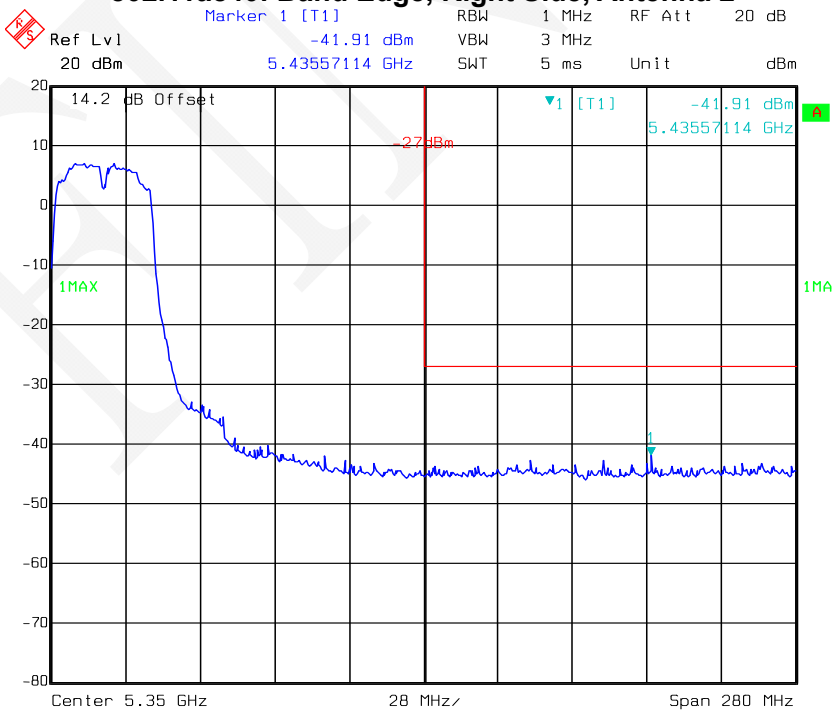


802.11ac40: Band Edge, Left Side, Antenna 2



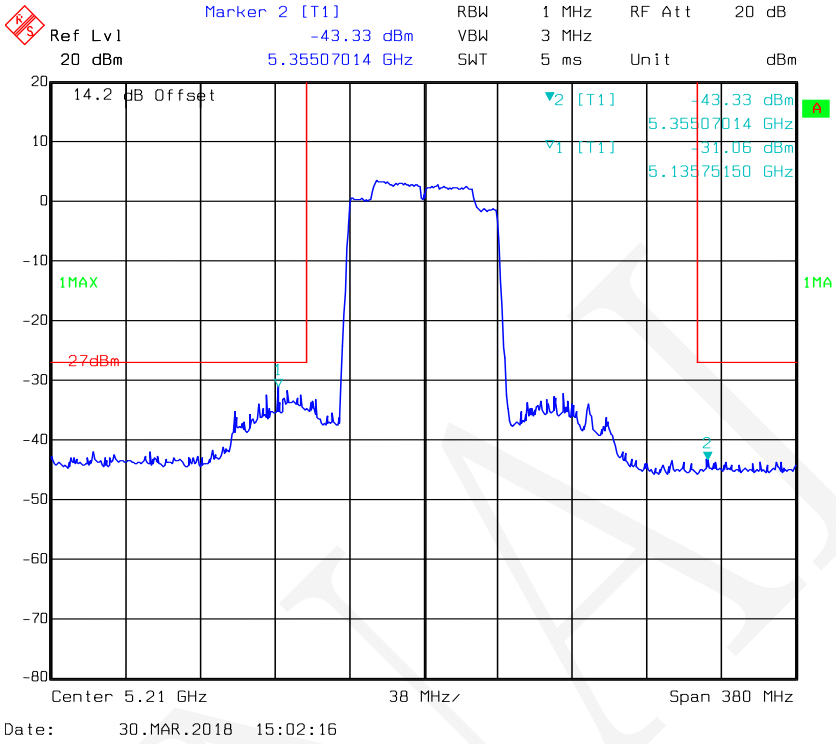
Date: 30.MAR.2018 14:29:31

802.11ac40: Band Edge, Right Side, Antenna 2

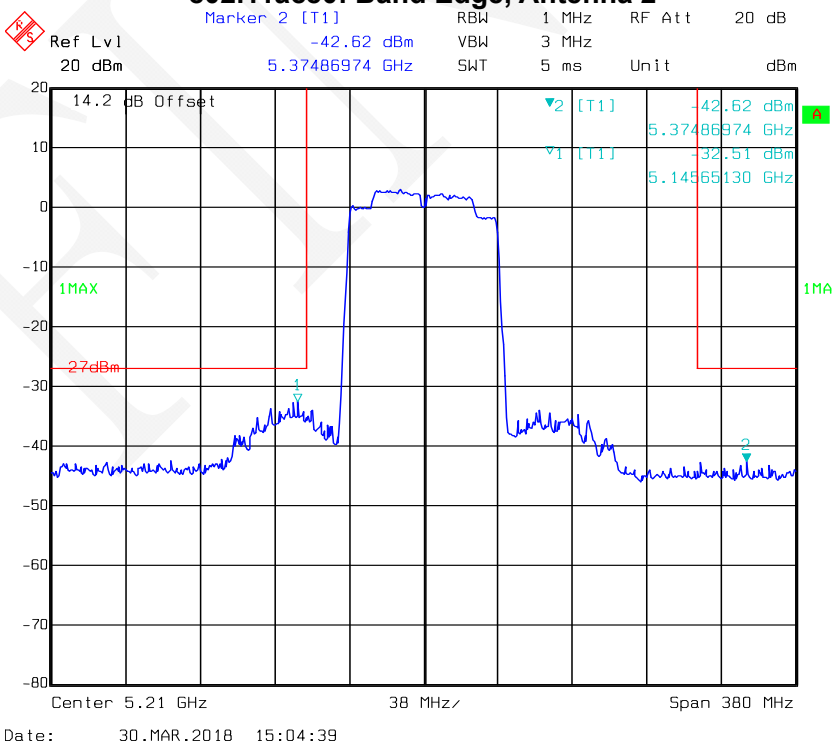


Date: 30.MAR.2018 14:31:05

802.11ac80: Band Edge, Antenna 1

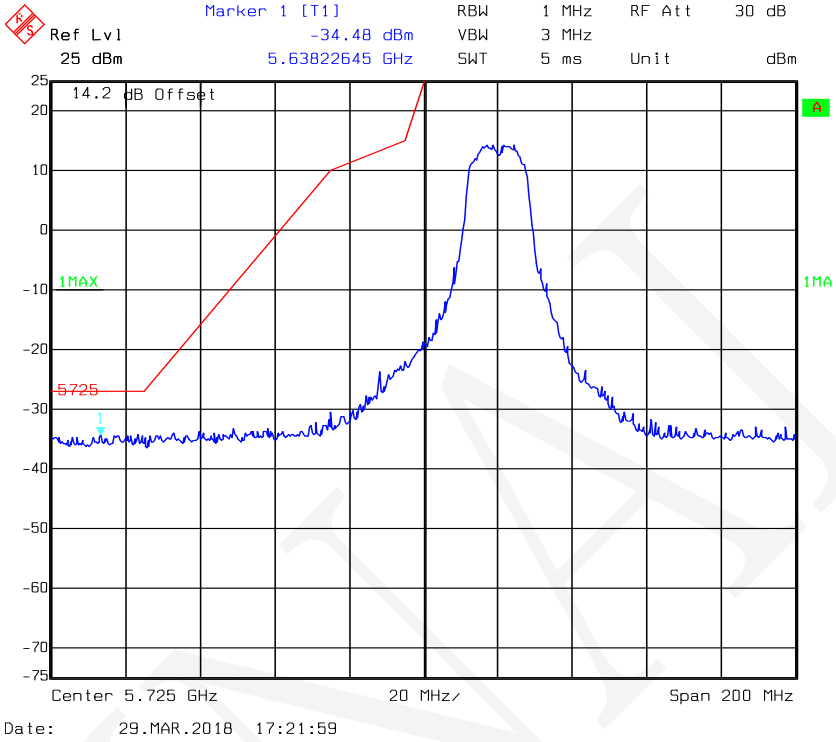


802.11ac80: Band Edge, Antenna 2

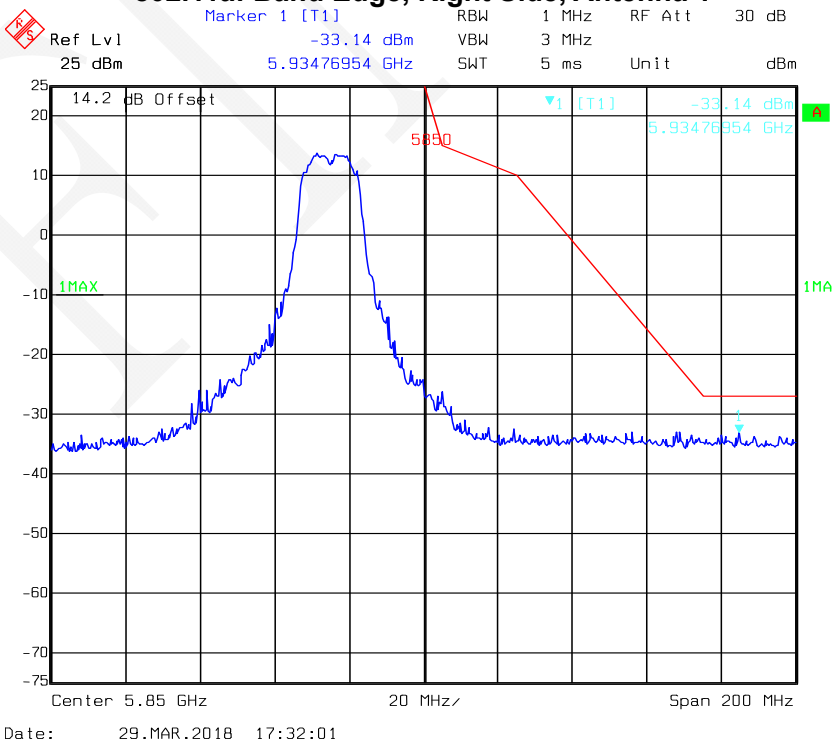


For 5725-5850 MHz: (Note: The antenna gain was set in the offset, all emissions under limit more than 3dBc, so MIMO mode also comply the requirement.)

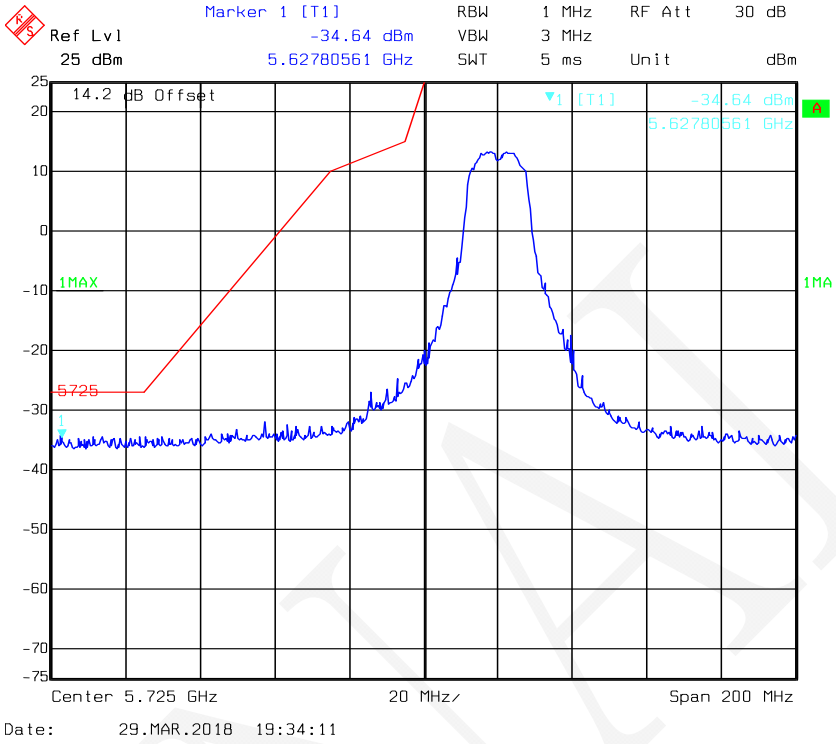
802.11a: Band Edge, Left Side, Antenna 1



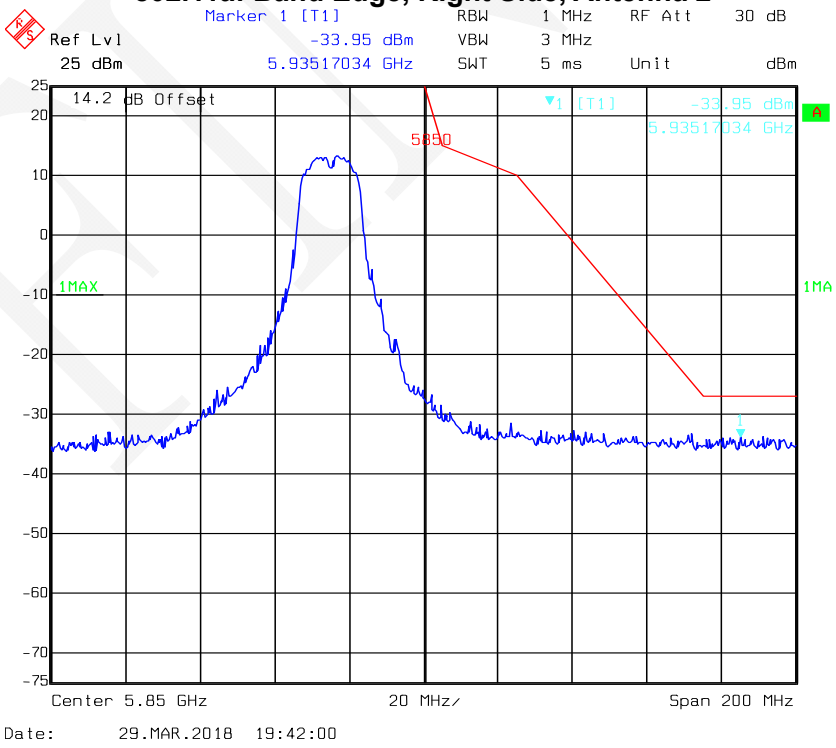
802.11a: Band Edge, Right Side, Antenna 1



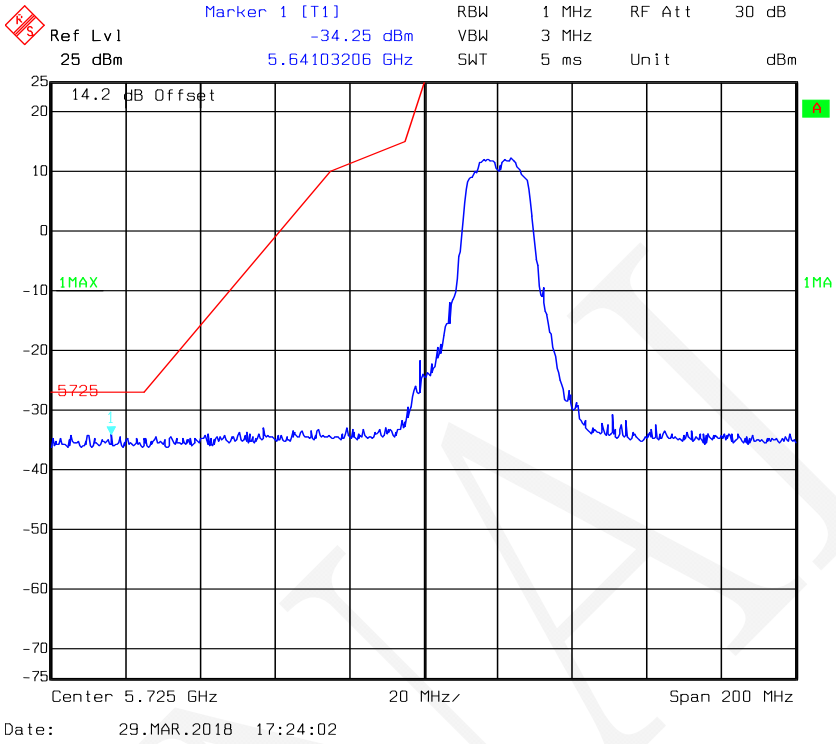
802.11a: Band Edge, Left Side, Antenna 2



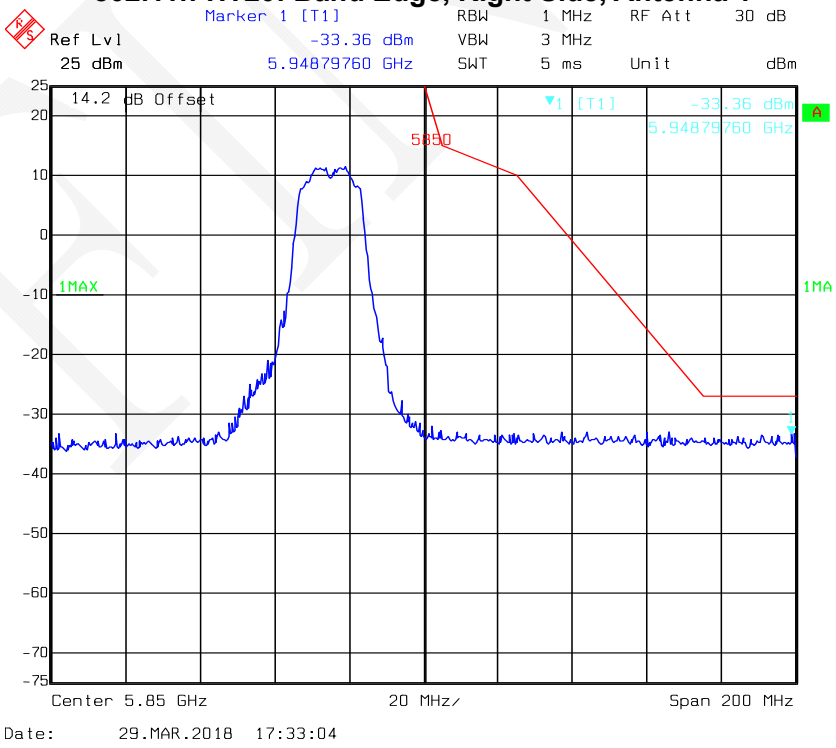
802.11a: Band Edge, Right Side, Antenna 2



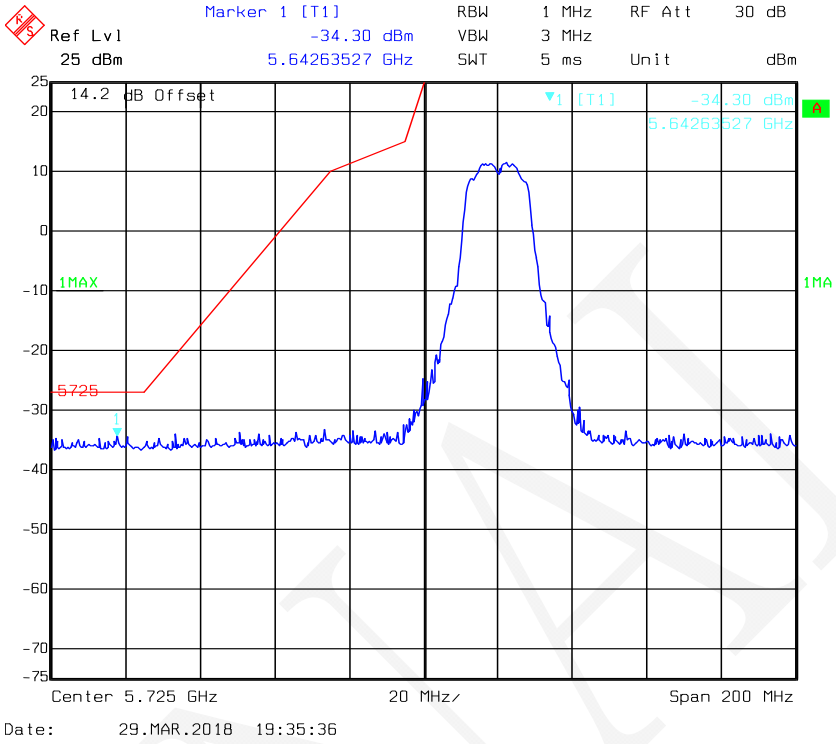
802.11n-HT20: Band Edge, Left Side, Antenna 1



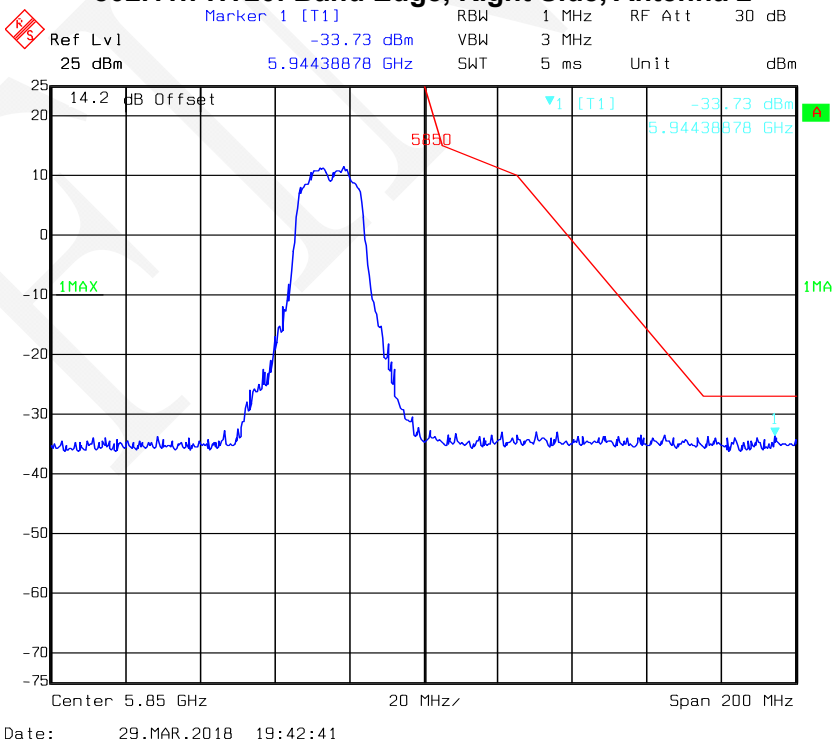
802.11n-HT20: Band Edge, Right Side, Antenna 1



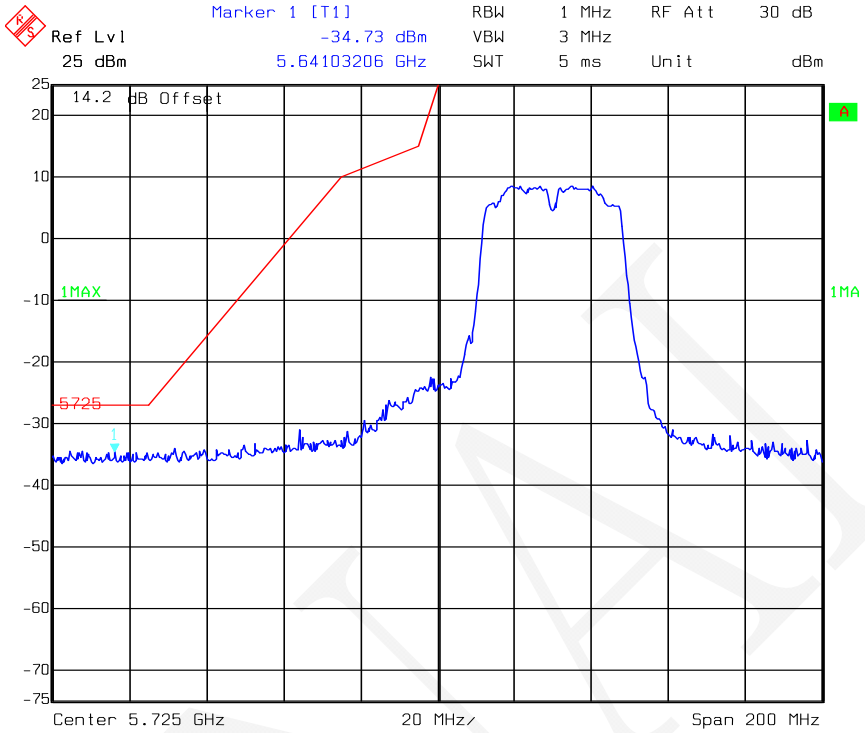
802.11n-HT20: Band Edge, Left Side, Antenna 2



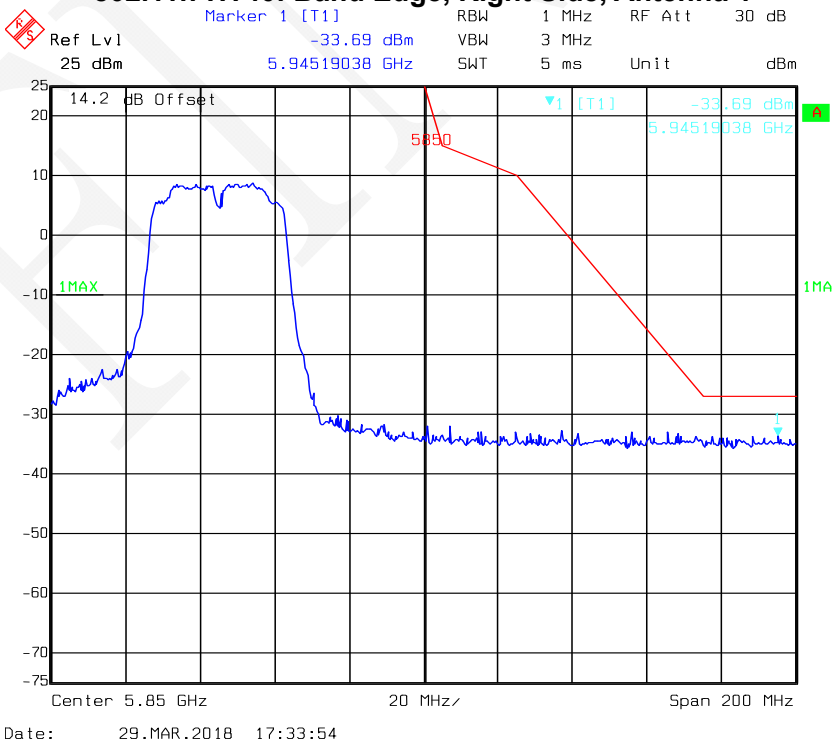
802.11n-HT20: Band Edge, Right Side, Antenna 2



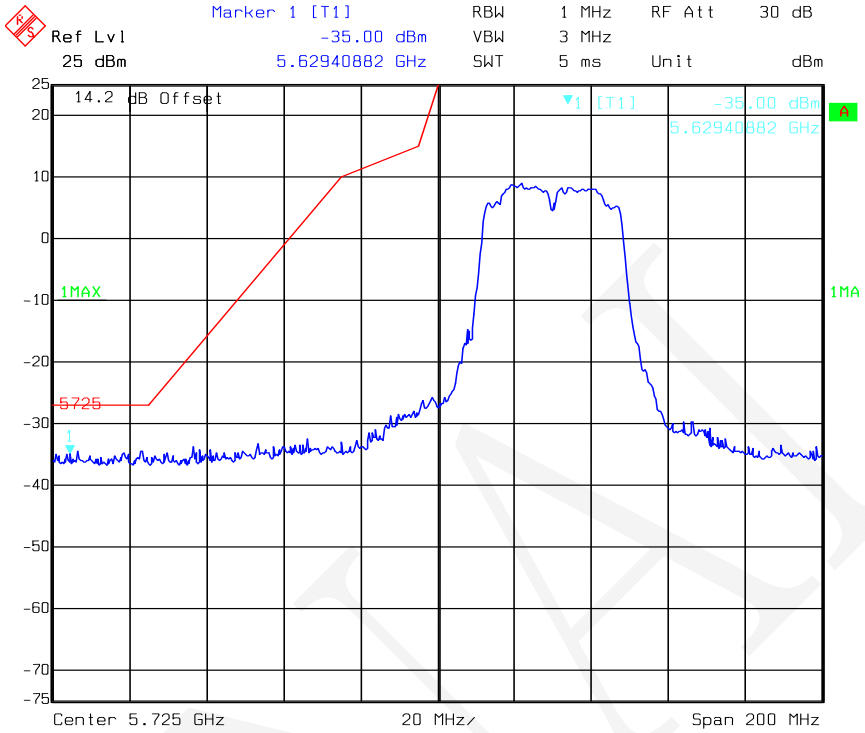
802.11n-HT40: Band Edge, Left Side, Antenna 1



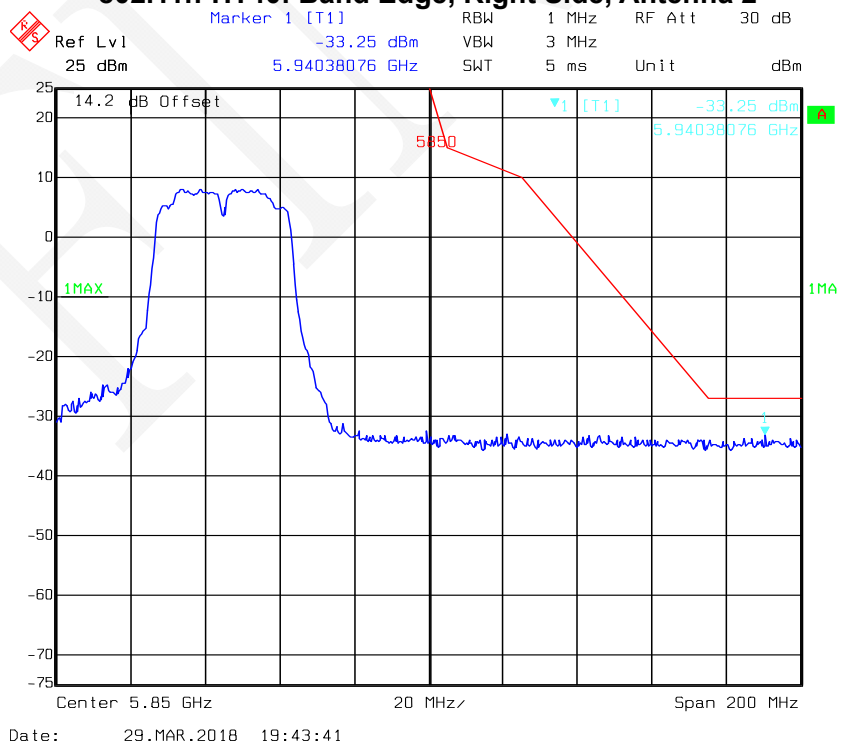
802.11n-HT40: Band Edge, Right Side, Antenna 1



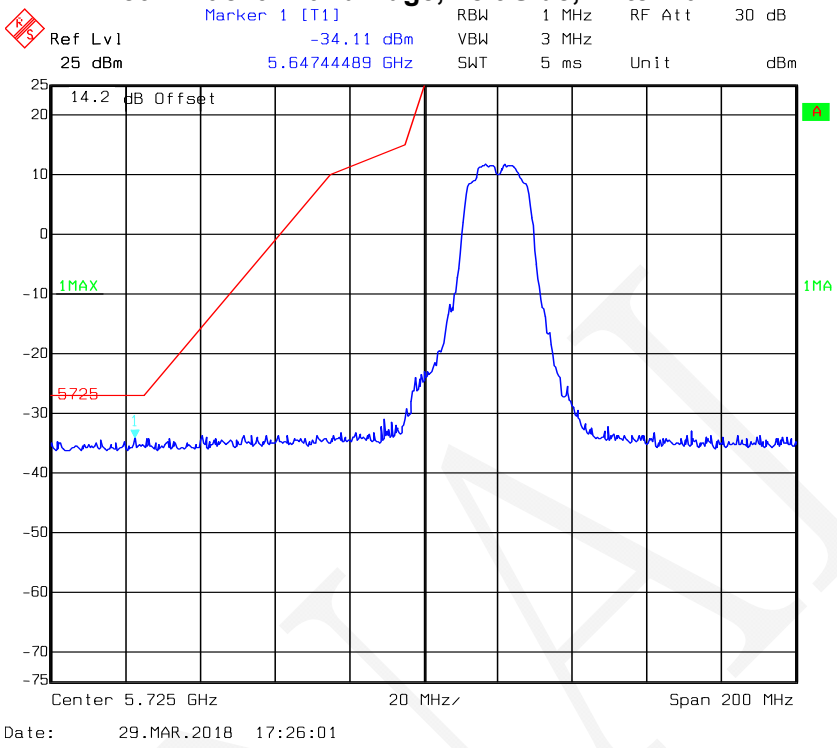
802.11n-HT40: Band Edge, Left Side, Antenna 2



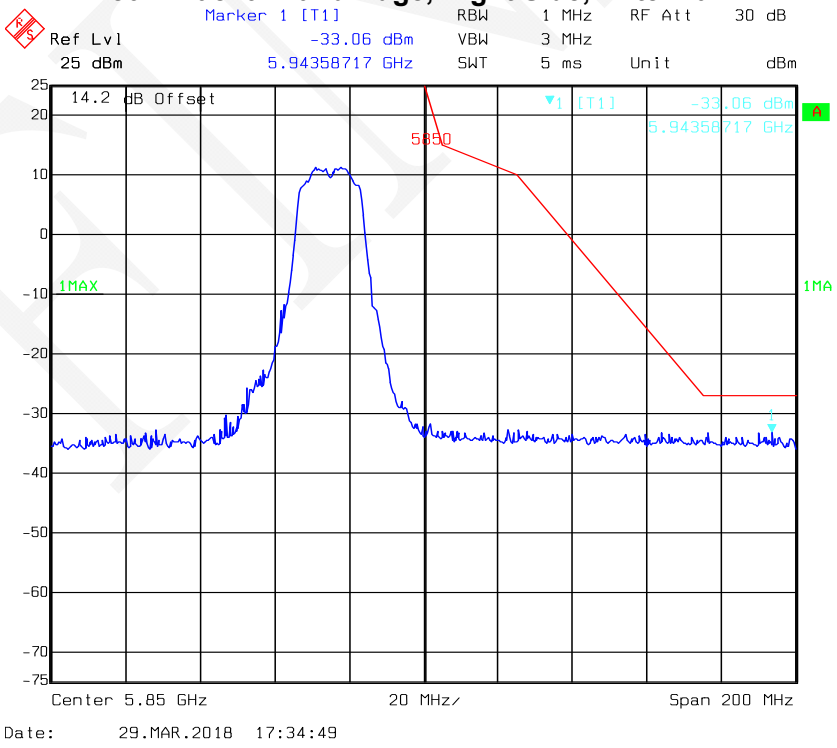
802.11n-HT40: Band Edge, Right Side, Antenna 2



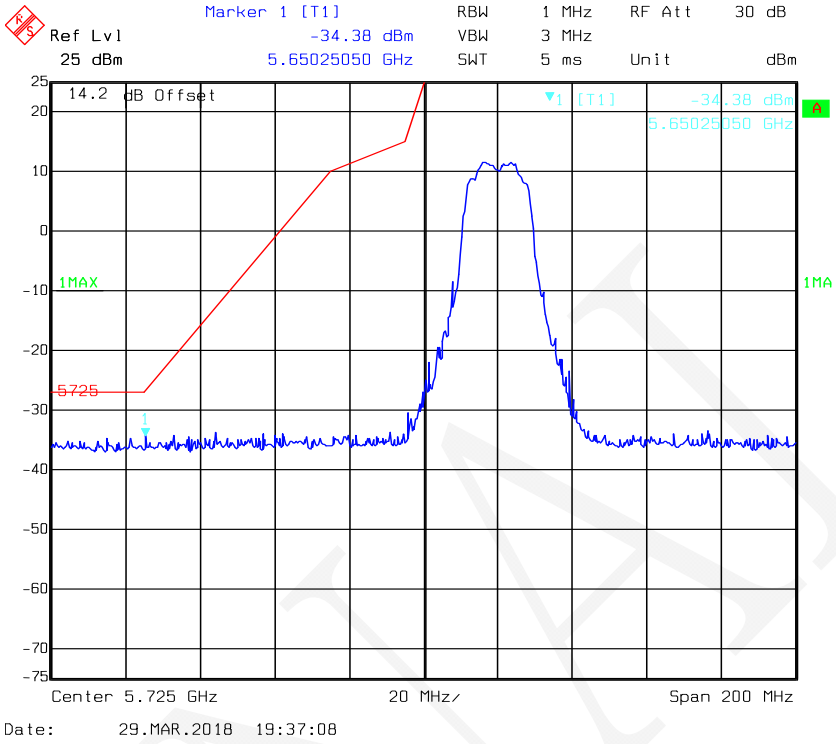
802.11ac20: Band Edge, Left Side, Antenna 1



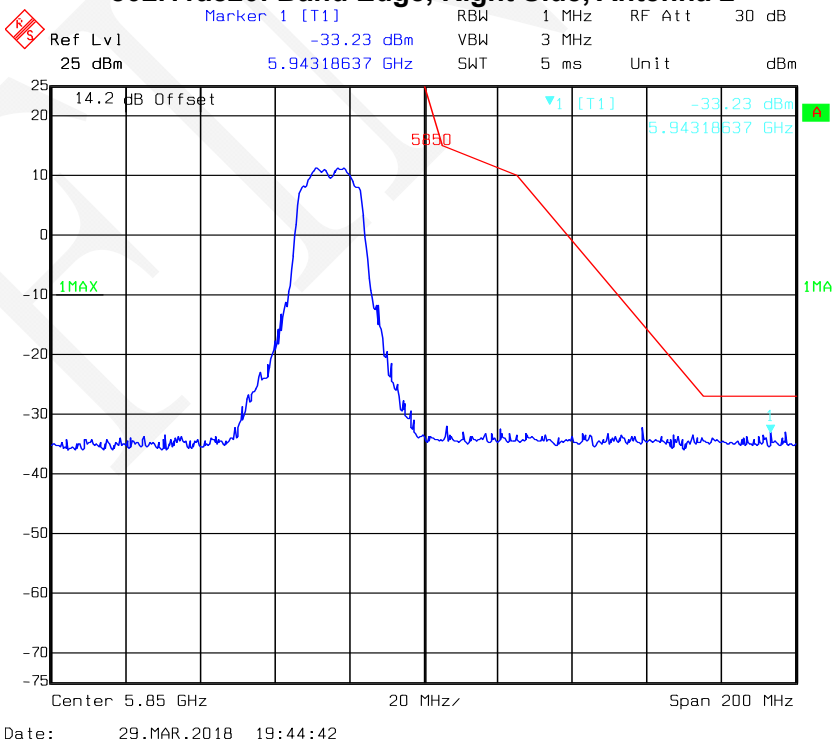
802.11ac20: Band Edge, Right Side, Antenna 1



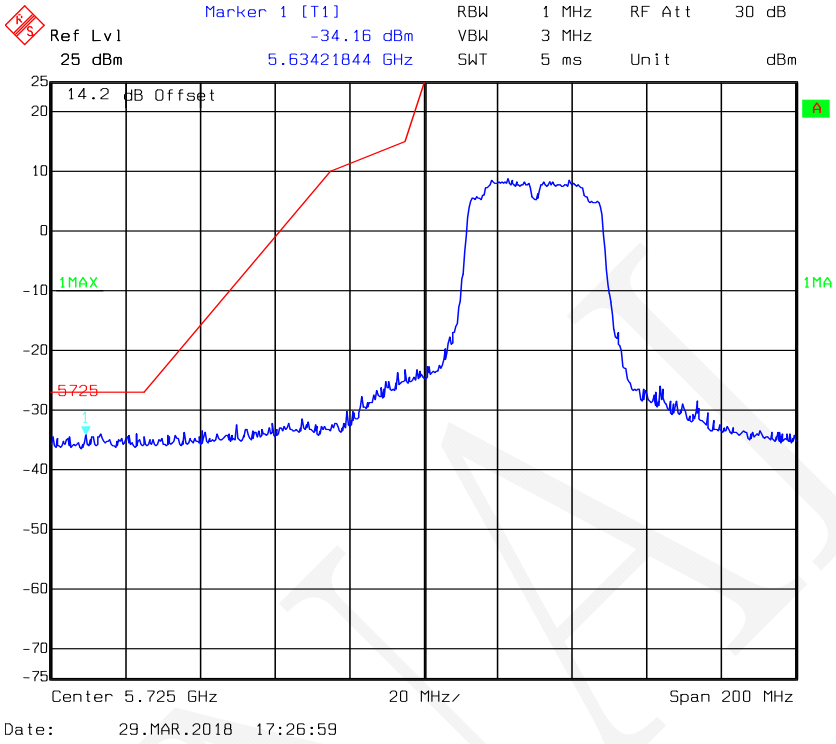
802.11ac20: Band Edge, Left Side, Antenna 2



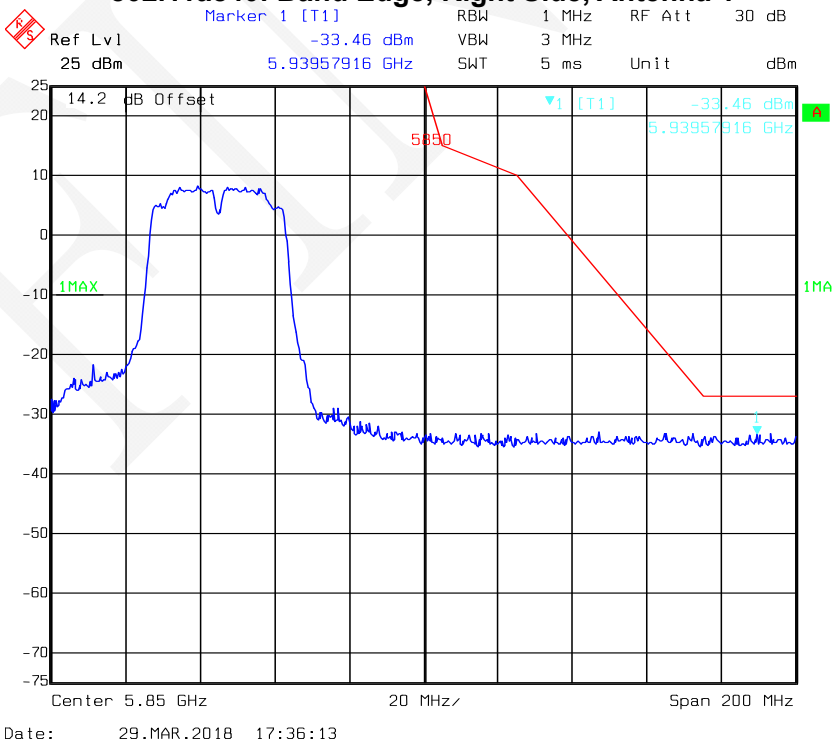
802.11ac20: Band Edge, Right Side, Antenna 2



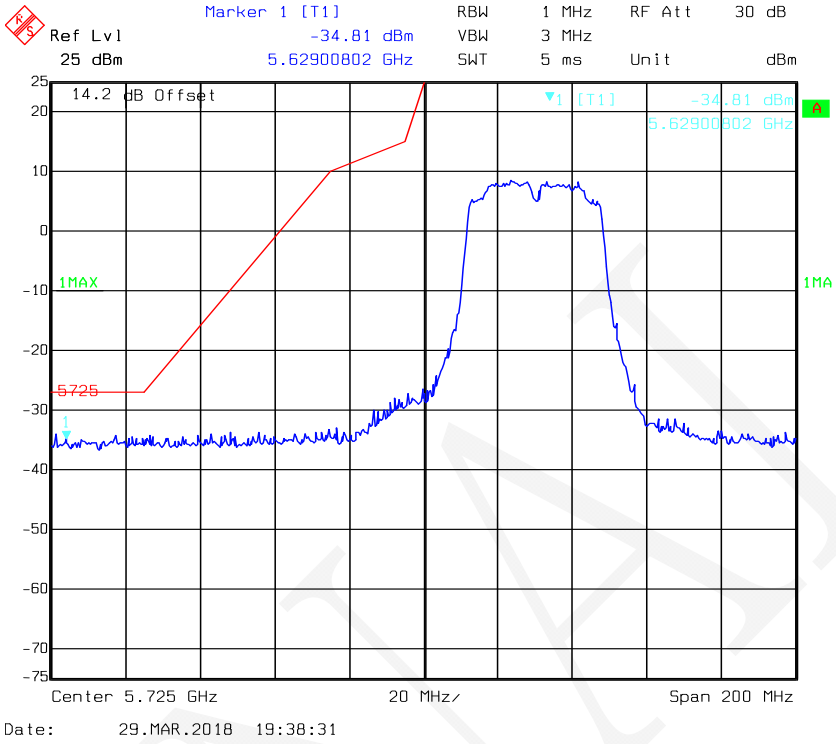
802.11ac40: Band Edge, Left Side, Antenna 1



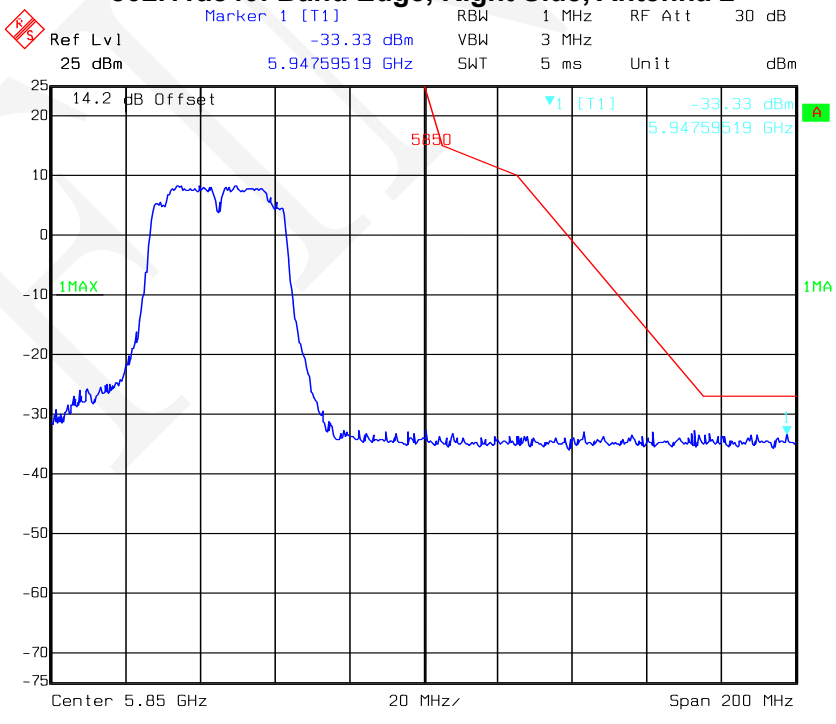
802.11ac40: Band Edge, Right Side, Antenna 1



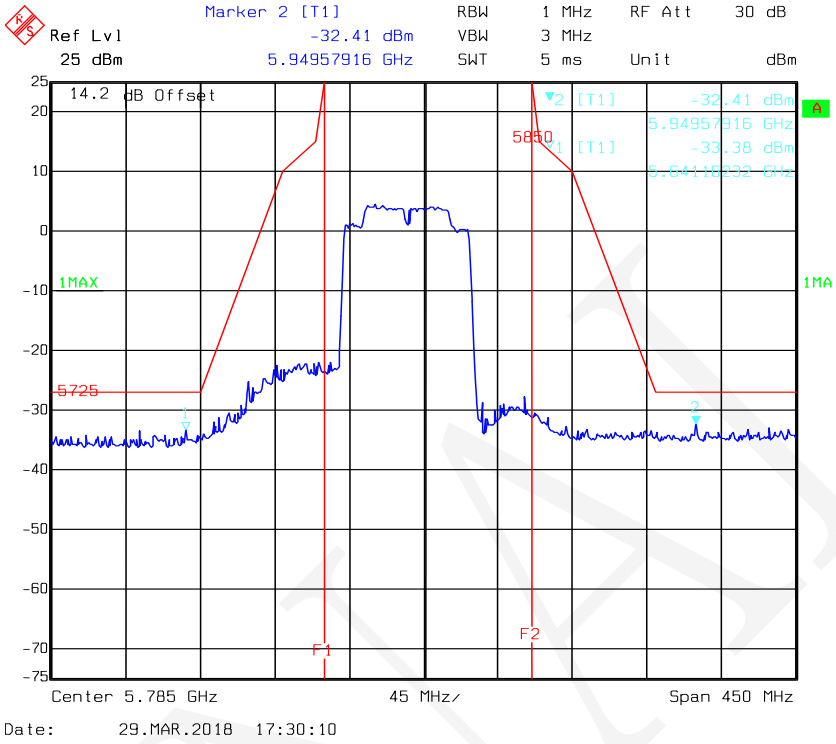
802.11ac40: Band Edge, Left Side, Antenna 2



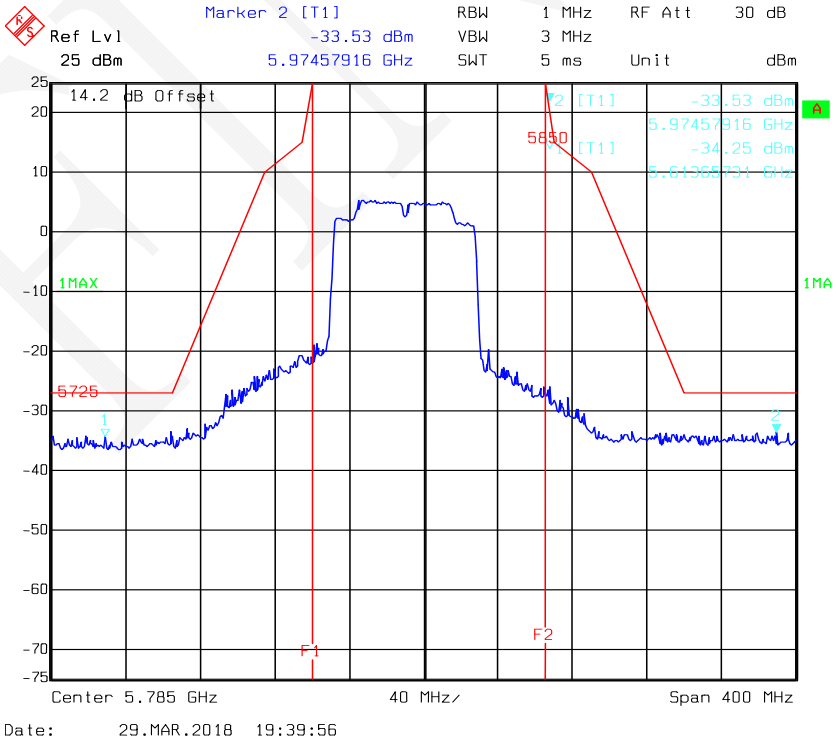
802.11ac40: Band Edge, Right Side, Antenna 2



802.11ac80: Band Edge, Antenna 1



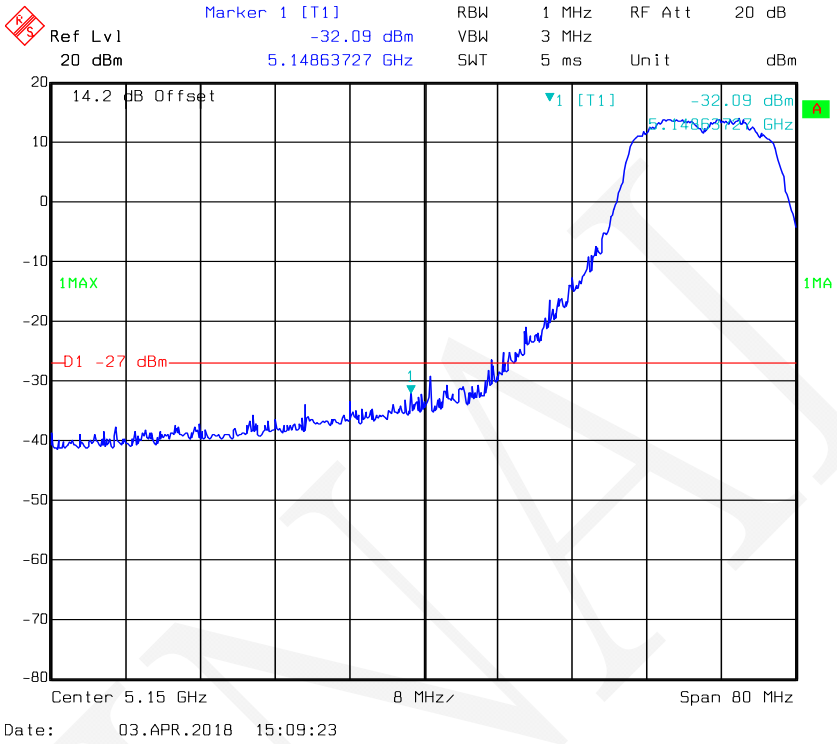
802.11ac80: Band Edge, Antenna 2



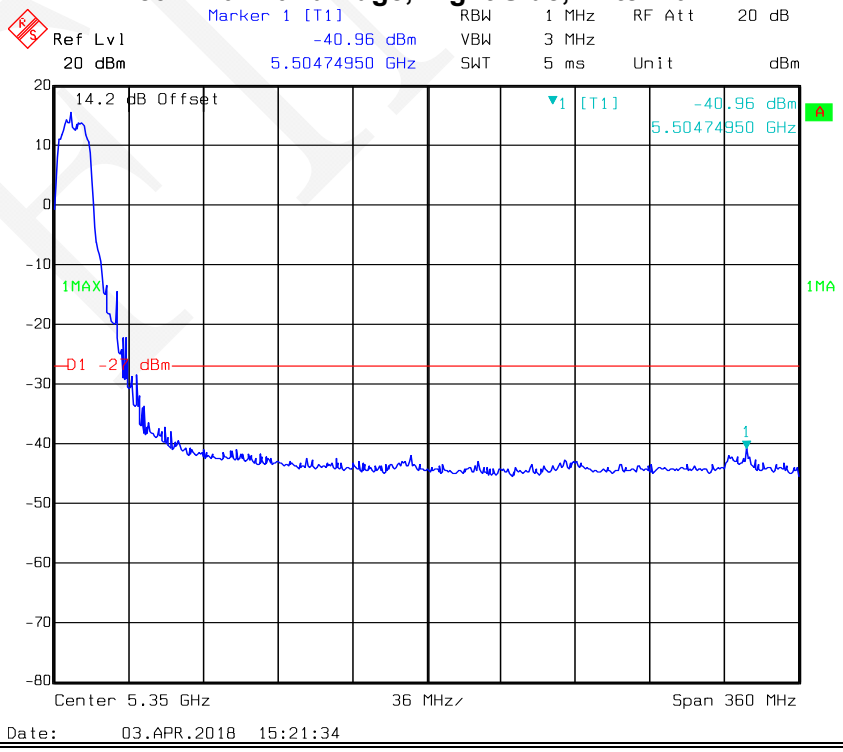
For 8265NGW Module

For 5150-5250 MHz (Note: The antenna gain was set in the offset, all emissions under limit more than 3dBc, so MIMO mode also comply the requirement.)

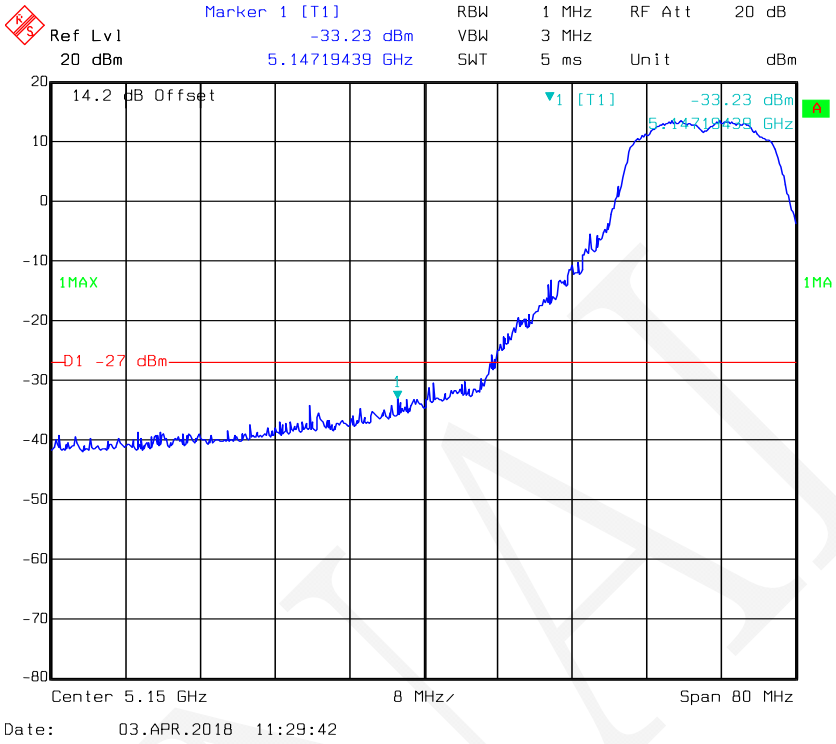
802.11a: Band Edge, Left Side, Antenna 1



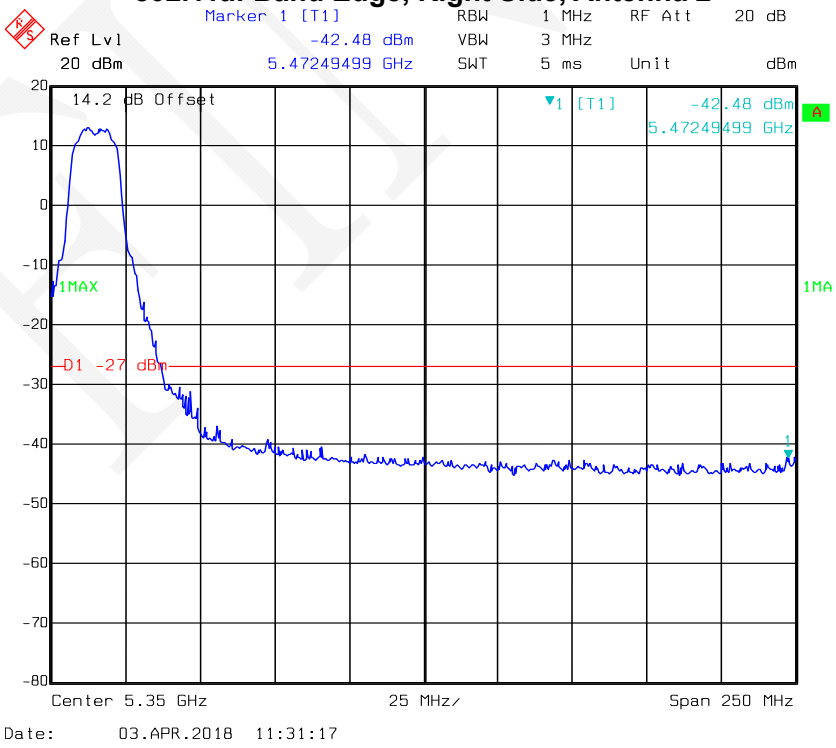
802.11a: Band Edge, Right Side, Antenna 1



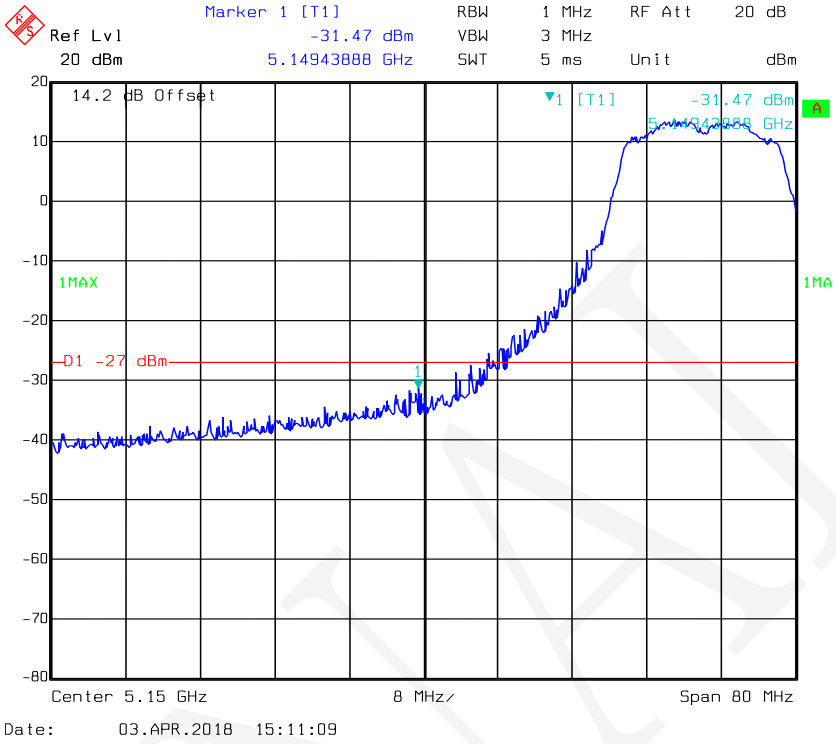
802.11a: Band Edge, Left Side, Antenna 2



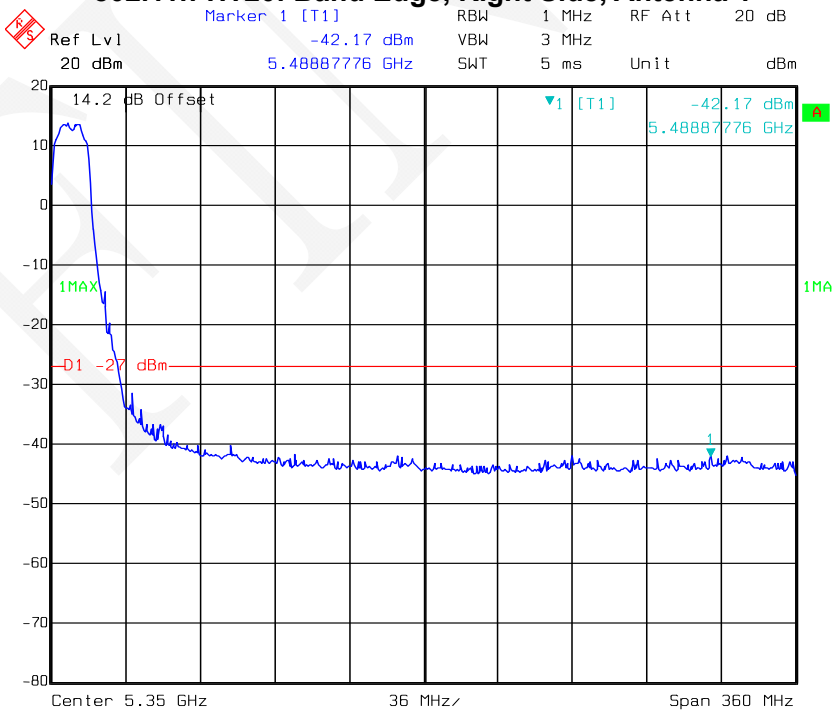
802.11a: Band Edge, Right Side, Antenna 2



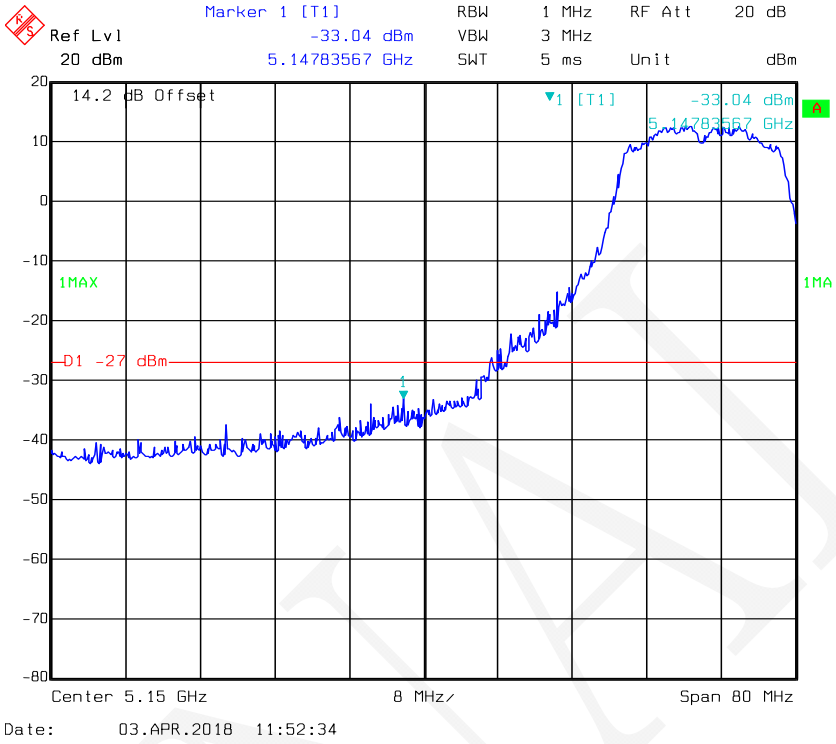
802.11n-HT20: Band Edge, Left Side, Antenna 1



802.11n-HT20: Band Edge, Right Side, Antenna 1



802.11n-HT20: Band Edge, Left Side, Antenna 2



802.11n-HT20: Band Edge, Right Side, Antenna 2